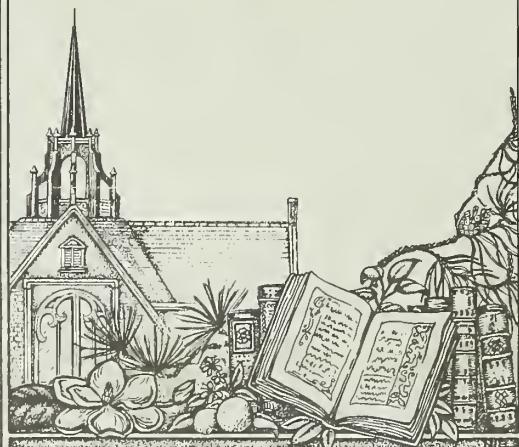
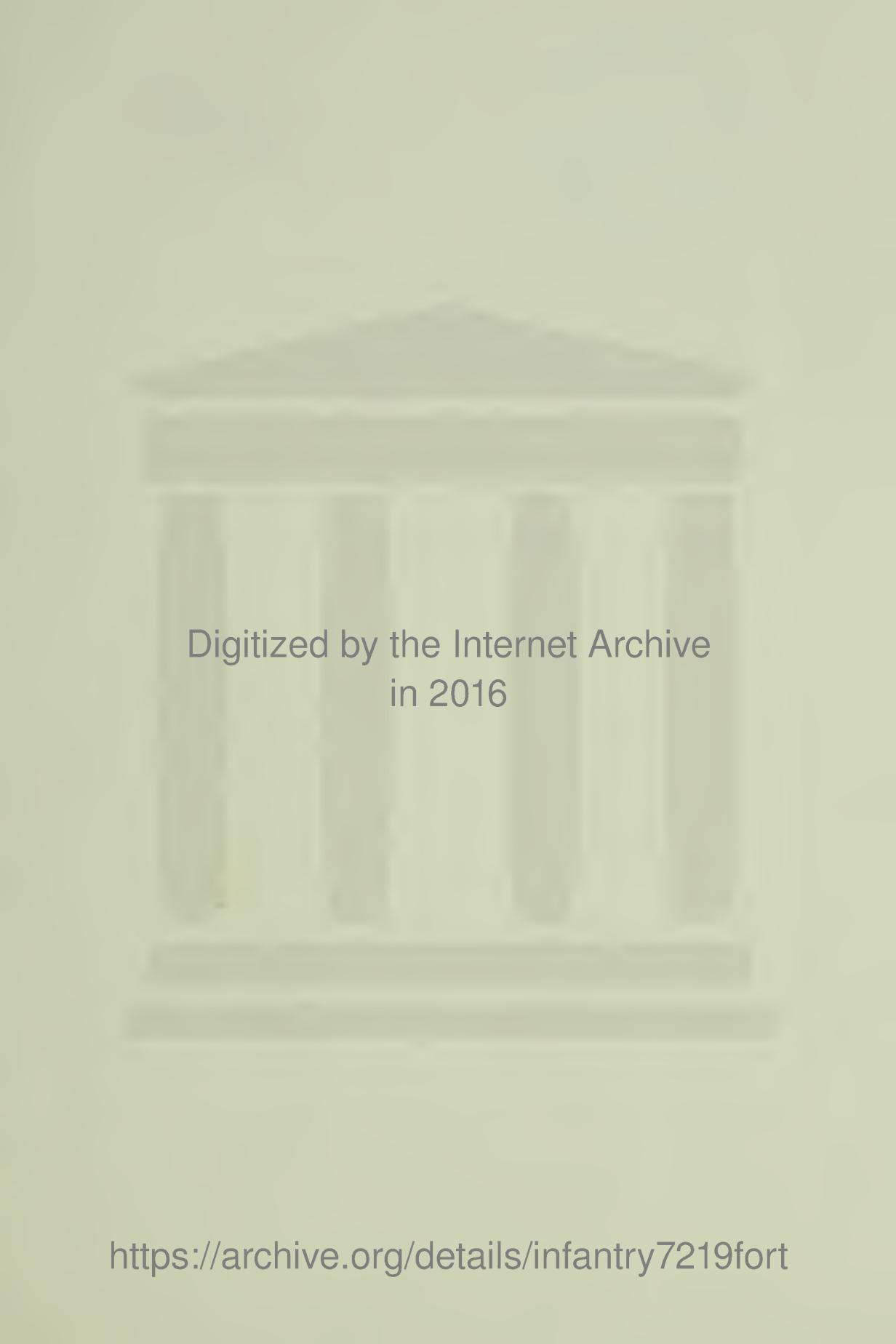


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A very faint, blurry background image of a classical building with four prominent columns, possibly a temple or a large hall, centered in the frame.

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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



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Infantry

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ARTICLES

- 14 TAMMS: LET'S WORK SMARTER**
Captain Joseph B. Wismann
17 FIGHTING IN AFGHANISTAN
Lieutenant Paul H. Vivian
22 CORREGIDOR: AN AIRBORNE ASSAULT
Major Charles E. Heller

FORUM AND FEATURES

- 6 INTEROPERABILITY WORKS**
Lieutenant General Eugene P. Forrester
9 GROWING A LEADER
Dandridge M. Malone
10 A COTTONBALER
Major Daniel A. Raymond Jr.
11 A BILATERAL STAFF
Major Walter E. Mather
13 STOP SHUFFLING S4s
Major John L. Morris Jr.

TRAINING NOTES

- 26 AIR DEFENSE TRAINING**
Captain Robert Kilmer Jr.
27 FLEX-HOC
Specialist-4 Eric P. Jorve
31 MAP READING BASICS
Major Stanley H. Holgate
Staff Sergeant Thomas A. Scrapansky
32 THE FIVE-DEGREE METHOD
Lieutenant Mitchell E. Toryanski
34 BATTALION OFFICER SCHOOL
Captain Walter A. Schrepel
35 PLATOON INVENTORY
Major Curtis R. Rogers

DEPARTMENTS

- 2 COMMANDANT'S NOTE**
3 INFANTRY NEWS
37 ENLISTED CAREER NOTES
40 OFFICERS CAREER NOTES
44 BOOK REVIEWS
49 LETTERS

FRONT COVER

THE UNITED STATES INFANTRYMAN — a man for all seasons.

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FLARE

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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

INFANTRY PLANNING FOR THE '80s AND '90s

Have you ever stopped and thought of the number of systems we are about to field over the next 20 years? It is impossible to list them here, but suffice it to say that we are talking about more than 35 systems. They range from the Bradley Fighting Vehicle System to the Close Combat Laser Assault Weapon (CCLAW), and every one will have a direct and profound effect on the Army in general and on the Infantry in particular. In every case, the introduction of these systems will require your personal attention to insure their successful fielding.

Those of you in the field, however, should not be expected to anticipate all that will be necessary to meet the challenge. That task properly rests with the Infantry School, and we have tackled the problem head on with the recent formation of the Strategic Planning Task Force (SPTF). Its charter is simple — to identify and define the issues that the Infantry will face through the year 2000 and beyond.

You will agree that this is a significant undertaking, for the task force's mission will be to serve as the "AWACS" for the Infantry. As new systems and concepts are developed, for instance, the SPTF will provide our community with early warning of the effects those systems and concepts will have on the people who must make them work — the soldiers. Too, our procedures for developing the doctrine, organization, training, and equipment must be properly identified and then orchestrated so that our infantry soldiers will be prepared

to use them when needed.

The task force's purpose, therefore, is to anticipate problems and provide solutions or alternatives to ease the introduction of the new equipment into our inventory. We intend to turn every stone in our effort to examine every aspect and exploit every available source, ranging from personal experience and gut feelings to white papers published by the Army Staff and elements of the Executive Branch. It is a major undertaking that must be done and done right the first time. We can ill afford not to be prepared for the future — whether it is 1984 or 1998.

These are actions that require people with keen minds and good solid "muddy boot time" to look at important matters and then recognize and articulate the effect of those matters on the Infantry community. The Infantry School is squarely in the middle of this effort and welcomes all comers who have keen minds and a wealth of experience. You owe it to the Army and yourself to share your knowledge as we strive to pull it all together.

The professional development and experience of "telling others how it is" provides untold job satisfaction. If you have finished the Advanced Course and believe that your experience will help the Infantry School get the Infantry ready for the 80s and 90s, contact us. Every job is geared to the task.

Think combined arms!

INFANTRY NEWS



THE INFANTRY SCHOOL has reprinted *The Defence of Duffer's Drift* and will distribute it to IOAC and IOBC students and to officer candidates. It will not be sold.

Duffer's Drift was written by then-Captain Ernest D. Swinton, British Army, in the early 1900s shortly after the Boer War ended. It has since become a military classic on minor tactics and has been reproduced in many countries.

The Infantry School feels that the lessons of *Duffer's Drift* are most applicable to today's professional soldier.

Courtesy copies of the publication have been sent to all Active Army and Reserve Component division commanders.

MANY READERS HAVE ASKED US about article reprints. Our staff is too small to permit us to reproduce articles that have appeared in our magazine, so we have made arrangements with the following organization to furnish reprints, at a cost, of our articles.

Reprints may be ordered from: University Microfilms International, Article Reprint Service, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Our foreign readers may order reprints either from the above address or from University Microfilms International, 30-32 Mortimer Street, Department P.R., London W1N 7RA, England.

THE BRADLEY INFANTRY FIGHTING VEHICLE (BIFV) is now entering the Active Army's inventory. Highly mobile and highly sophisticated, the Bradley can roar along at speeds of up to 42 miles per

hour, deliver unprecedented firepower, and even swim rivers. It has proved in 18 months of tests to be the most formidable fighting machine of its type ever built. It will be joining the new Abrams main battle tank to form the backbone of the Army's combined arms team. (See Captain Robert P. Sedar's article, "Employing the IFV," INFANTRY, September-October 1981, pages 33-37.)

One hundred Bradleys will be coming off the assembly line under a \$206 million one-year contract that will help the Army begin to close a critical combat vehicle gap.



The Bradley carries a driver, commander, gunner, and six additional infantrymen. The Bradley Cavalry Fighting Vehicle (BCFV), designed for use as a scout vehicle, has a driver, commander, gunner, and two cavalrymen, and it carries extra ammunition.

When the BIFV is fielded, there will be a one-for-one exchange for the armored personnel carriers now

found in the Army's mechanized infantry units. This means that a mechanized infantry rifle company will receive 13 BIFVs in exchange for 13 of its APCs. Since each battalion commander and each S3 will also receive a BIFV, each mechanized infantry battalion will be able to field a total of 41 of these vehicles. (The scout platoon in the combat support company will receive six BCFVs, and the FAC will also be equipped with a BCFV.)

Under the Division 86 concept, a fourth rifle company will be added to each battalion. This will bring the total number of Bradleys in a mechanized infantry battalion to 54.

The Infantry School is actively involved in developing the total Bradley training support package. Tests and evaluations are scheduled throughout 1982 to measure the effectiveness of this training package. Manuals and courses of instruction must be refined and validated. Clearly, this training support package will be as good as the equipment for which it is being developed.

The infantryman of the 1980s will fight from a vehicle that is "second to none." The Bradley is an integral part of tomorrow's combined arms team.

BAYONET TRAINING HAS BEEN reinstated in the Army with the construction of a 400-meter bayonet assault course at Fort Benning, Georgia. The course, built by Company C, 43d Engineer Battalion, will be used to train the soldiers who go through Infantry One Station Unit Training (OSUT).

The OSUT soldiers will receive nine hours of bayonet training. They will spend six hours learning and practicing the basic movements, parries and

INDEX

The 1981 index to INFANTRY has been prepared separately and is available to anyone who requests a copy. Please address your request to: Editor, INFANTRY Magazine, Box 2005, Fort Benning, Georgia 31905.

4 thrusts, and the other three going through the course.

Ten soldiers at a time can go through the course. They leap over trenches filled with barbed wire, run up embankments, cross narrow foot



bridges, and crawl under barbed wire. There are 18 obstacles in all, and interspersed among them are bayonet targets, which are essentially automobile tires mounted on stands to simulate human forms.

To save wear and tear on their M16 rifles, the soldiers use mock M16s made of synthetic rubber.

If the course proves successful, others will be built.

A NEW, TEMPORARY PERSONNEL MANAGEMENT tool, the Project Development Identification (PDI) code, has been introduced by the Army's Military Personnel Center.

The PDI code will be used to identify commissioned and warrant officers as well as enlisted personnel who have had experience with a specific project or item of equipment during its developmental and testing stages and for whom no other appropriate occupational identification has been implemented.

A new Army Regulation governing PDI codes and their associated sub-codes has been drafted and should be available soon.

THE FOLLOWING NEWS ITEMS were submitted by the U.S. Army Infantry Board:

- **TOW-2.** In August 1979, a

Department of the Army in-process review came up with a requirement that looked toward improving the TOW system.

The first step the Army took was to develop an improved five-inch warhead for the TOW missile then in use.

The second step was to develop a full caliber (six-inch) warhead and a hardened electro-optical link. This second development is referred to as the TOW-2.

The Infantry Board conducted an operational test of the TOW-2 system during May and June of 1981. Its purpose was to provide data on the operational suitability of the TOW-2.



TOW system mounted on an M151 vehicle.

Manned firing tests were conducted at Redstone Arsenal, Alabama, and the test soldiers fired both the current TOW system and the TOW-2 system at moving and stationary targets at short, medium, and long ranges. Six test gunners from the Infantry Center and from the U.S. Marine Corps fired the systems from the ground, from the ITV, from the M113, and from the M151. Battlefield conditions were simulated to the greatest possible extent.

The operational test manager was Captain Heinz J. Roye, and his assistants were Sergeant First Class Sherman Jordan and Sergeant First Class Ronald E. Bristow.

• **XM30.** Between June and August of 1981, the Infantry Board conducted an operational test of the XM30 series of protective masks. This series of masks is intended to



Soldier firing M16 rifle while wearing M30 protective mask.

replace the protective masks now being used in the Army. The Infantry Board's test was designed to provide data and associated analyses on the operational suitability of the XM30 as a replacement for the M17A1, the XM30 SPM for the M9A1, and the XM34 as a replacement for the M25A1.

The test soldiers were drawn from infantry, artillery, armor, engineer, and ordnance units. Each was issued a test mask and a control mask, and they alternated the use of the two masks during the operational exercises.

The testing program consisted of live fire exercises with the weapons assigned to infantry, armor, and artillery units; exercises in a simulated combat and NBC environment; engineer and explosive ordnance disposal tasks; airborne exercises, and an obstacle course. Throughout the testing, contamination was simulated by the use of smoke and training agents.

The operational test manager was Major Richard Sorrell, and his assistants were Sergeant First Class Sammie Brown and Staff Sergeants Robert L. Brown and William D. Kaylor.

• **VIPER.** The Infantry Board conducted an operational test of the Viper during June and July of 1981. The Viper tactical system is intended to satisfy an operational requirement for a more accurate, more lethal weapon than the present LAW. The Board's test was designed to provide

data and observations on the operational effectiveness and suitability of the Viper to the Army Systems Review Council for its consideration in making a production decision.

The operational test addressed such issues as mission performance (hit percentage and engagement times), reliability, safety, training programs, training equipment, doctrine, and human factors. A side-by-side comparison of the Viper and the LAW was conducted using typical troops.

During live fire exercises, four tactical missions were completed. Both systems were fired at manned, evasive-target tanks. Single, pair, sequence, and volley techniques were used with both systems.

The operational test manager was Captain Noble T. Johnson, and his assistant was Sergeant First Class Kenneth W. Harbin.

RANGER STUDENTS are still reporting to the Ranger School at Fort Benning without the proper items of clothing and equipment. The following is a list of the required and highly recommended items that each Ranger student should have in his possession when he reports for his class:

REQUIRED

- 6 sets fatigue uniforms (8 are recommended). One set must have all authorized insignia attached. The rest must be stripped except for the OD name tape and the U.S. Army tape.

- 3 pairs of combat boots. Boots should be broken in before the course begins. (No jungle boots are authorized during the mountain phase between 15 October and 15 April; they are not a substitute for combat boots at any time of year.) Insulated boots are not authorized for the course.

- 12 pairs (at least) cushion sole socks.

- 6 sets underwear (only OD T-shirts are authorized).

- 2 pairs long wool underwear (winter only).

- Identification card and identification tags.

- 1 baseball cap.
- 2 black web waist belts with buckles.
- 3 pairs boot blousing garters.
- 1 pair black leather shell gloves.
- 2 pairs glove inserts.
- Pocket size notebook, pens, pencils.
- Shaving brush and toothbrush for cleaning weapons.
- 5 pairs extra nylon bootlaces.
- Duffel bag with lock.
- 3 Padlocks (combination type recommended).
- 2 pairs military issue eyeglasses for students who wear them (contact lenses are not allowed). Two sets of retainer bands are recommended.
- Pile cap.
- Wristwatch (inexpensive but durable).
- 2 field jackets for winter, 1 for summer.

HIGHLY RECOMMENDED

- Hunting knife (or large pocket knife) and whetstone.
- Plastic waterproof bags.
- Map case.
- Sewing kit.
- Black friction tape.
- 2 plastic protractors.

No Class A uniforms are required for students in the Ranger Course, but all personnel, including those of other U.S. services and other nations, must have the equivalent service uniform for travel status to be worn in accordance with the regulations of the service concerned.

All other required clothing and equipment will be issued by the Ranger training companies. The students need not buy any other equipment on their own.

The normal dates for change of uniform seasons at Fort Benning are 1 April and 1 November. Students who are attending a class that extends from one season into the other must have uniforms that are appropriate for both seasons.

In addition to the above requirements, incoming Ranger

students must have in their possession their health and dental records (including a medical examination dated within the last year from the reporting date), their 201 files, their pay records, ten copies of their orders and a certification of their entry skills.

All incoming students must report to the 3d Ranger Company in the Harmony Church area of Fort Benning before 1600 hours on the reporting date for their class.

For additional information concerning the Ranger School, interested individuals are referred to ST 21-75-1, The Ranger Course Pamphlet.

THE COUNTER-OBSTACLE VEHICLE shown in the accompanying photograph was developed and equipped with mine clearing equipment by the Army and Marine Corps. It has demonstrated the feasibility of breaching an antitank minefield with an unmanned, remote controlled system.

For this demonstration, a modified



M60A3 tank chassis was fitted with a mine clearing roller, a Marine Corps M58A1 mine clearing line charge, and a clear lane marking system (CLAMS). The vehicle was operated by personnel who were a mile from the minefield.

The counter-obstacle vehicle found the boundary of a minefield by using its mine clearing roller to set off one of the mines. It then backed up and breached the minefield by projecting the rocket-propelled mine clearing line charge. As it cleared a path through the minefield, the vehicle marked the safe lane as it moved through.

FORUM & FEATURES



INTEROPERABILITY WORKS



LIEUTENANT GENERAL EUGENE P. FORRESTER

The Combined Field Army (ROK/US) (CFA) is known as the "Shield of Seoul." It is composed of three Republic of Korea Army (ROKA) corps and 13 divisions, including the 2d U.S. Infantry Division. The CFA's mission is to defend the important western sector of the demilitarized zone (DMZ), which includes the three historic invasion routes into the Republic of Korea.

Because of its combined nature, the CFA has a "C" staff instead of a "G" or an "S" staff. The commanding general, chief of staff, the Inspector General, and the Staff Judge Advocate are members of the U.S. Army, while the deputy commanding general, deputy chief of staff, and C3 are ROKA officers. All other primary and special staff members are senior ROKA officers with senior U.S. Army officers as deputies (Figure 1). This is not an advisor or counterpart relationship such as that used in Vietnam; both the ROK and U.S. members are fully integrated into a combined organization.

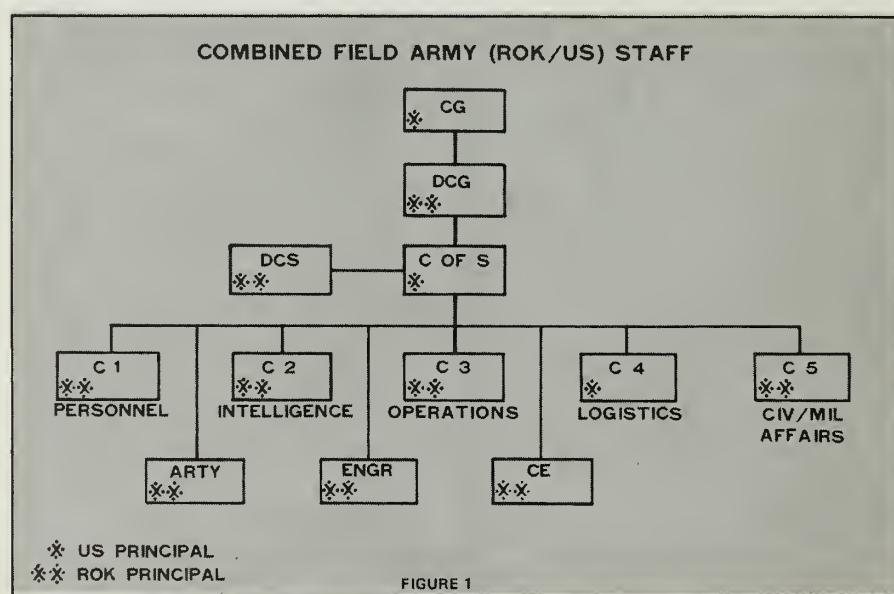
How does CFA train, in a real world situation, to defend against an implacable enemy who has twice as much artillery, three times the number of tanks, twice as many aircraft, and four times as many ships?

Part of the answer to that question lies in the concept of *interoperability*. Interoperability is essentially a self-image that includes a total reliance upon and belief in a true combined command and the ability of diverse national components to operate as one cohesive, well-disciplined military element.

Interoperability is the end result of *rationalization* and *standardization*. Rationalization is a thought process that identifies and evaluates the methods through which different armies perform combat, combat sup-

port, and combat service support functions. The process identifies similarities and differences and searches for ways of capitalizing on the similarities and compensating for the differences.

Standardization involves the development of like ways of doing things, such as organizing tasks, conducting military operations, producing and reporting intelligence information, and requesting and providing logistical support. It also involves using the same operating procedures and the same language as much as possible.



In pursuit of interoperability and of readiness to accomplish its assigned mission, the CFA periodically conducts three different no-notice exercises: FOG RAIN, FOG RAIN ALPHA, and CROSS BUCK.

The CFA headquarters conducts a FOG RAIN practice alert exercise quarterly. It begins with a no-notice communications check made by radio to conduct an immediate 100 percent muster. A confirmation message is sent concurrently by teletype in both English and Hangul (the language of the Korean people). This message designates selected units through regiment or brigade levels to move with their basic combat loads to specified assembly areas.

During a FOG RAIN exercise, observers travel to various locations throughout the field army area and check to see that the standards are maintained in personnel and material readiness. They also report on the preparations for and movement to the assembly areas and on their occupation and defense. The observers also check on road or cross-country marches, on communications, light and camouflage discipline, and on troop health, welfare, and morale. Thus, FOG RAIN exercises give commanders and staffs at all levels good insight into the readiness of their units.

FOG RAIN ALPHA is a live fire, time-on-target (TOT) exercise for CFA's field artillery units. It involves all available artillery units within the range of the exercise target, including units from adjacent corps and from the 2d U.S. Infantry Division Artillery. The exercise requires all participating units to fire simultaneously at a target designated by the CFA commander. This greatly improves the combat readiness of all CFA artillery units, because it allows them to practice artillery procedures at corps level and below and at the same time to check their responsiveness and their ability to mass fires across corps and division boundaries.

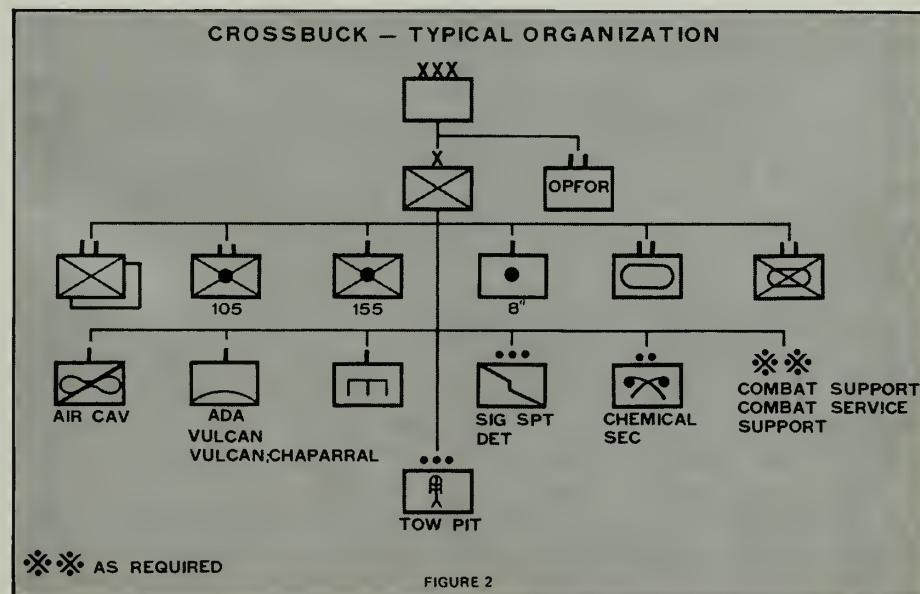
To succeed in combat, units must be able to move, shoot, and communicate in a tactical environment,

and they also must be able to sustain themselves. FOG RAIN and FOG RAIN ALPHA clearly test a unit's ability to shoot, move, and communicate, but they do not validate a unit's ability to do these things in a field environment for a sustained period of time. The CROSS BUCK exercise does.

CROSS BUCK is a field training exercise (FTX) for sustained inter-corps and combined military operations. (A typical combined ROK/US regiment or brigade combat team is shown in Figure 2.) It can be conducted either concurrently with a FOG RAIN alert or as a separate exercise at a different time. It takes selected elements from throughout

preparing for and moving from an assembly area, occupying defensive positions, conducting a hasty defense, carrying out local counterattacks, crossing a water obstacle, and conducting battalion-sized airmobile operations.

In addition to controller personnel for such a mission, CFA and the corps that is participating in the exercise provide evaluation teams to the headquarters of each brigade, battalion, and company, troop or battery that is taking part. Primary and special staff evaluators are also dispatched to the various field locations to observe, assist, and occasionally instruct in their functional areas. Particular emphasis is placed



the Combined Field Army through defense condition (DEFCON) checklists to their designated assembly areas, and then continues with a combined-joint FTX for four days and three nights.

Only four headquarters elements (CFA, the selected corps, the regiment or brigade, and the opposing force) know in advance that they are going to take part in a CROSS BUCK exercise. In addition, one of the corps will provide the terrain and the tactical scenario.

During the exercise, a number of typical combat operations are held during daylight hours as well as during the night. These may include

on the fire support elements, including tactical air, intelligence, operations, resupply, and communications.

Differences in the frequency spectrum and international agreements, combined with CEOI's in different languages, create interesting challenges to combined operations. Similarly, since each nation provides its own logistic support, composite maintenance and supply contact and support teams have to be formed. Other challenges include bilingual maps, messing and medical support, traffic control, and realistic training with minimal maneuver damage.

A CROSS BUCK exercise can be called any time, any day, anywhere.

The CFA commander selects the time and day. For example, at 1600 on a Sunday, the sirens and other alert notification methods may be implemented throughout CFA. Concurrently, the CG reviews a list of units and locations and their activities. At this time, he selects sub-elements from throughout the three corps and 13 divisions to participate in the exercise, and these elements are notified to proceed to designated assembly areas.

At the same time, the commanders of those units with some staff representatives (normally logistics, artillery, and communications) and some bilingual personnel, travel to the regiment or brigade headquarters field locations to receive their intelligence briefing, maps, and movement and operations orders.

In addition, the commanders are prepared to exchange CEOIs and bilingual liaison officers and other personnel. The U.S. Army elements also use personnel from the Korean Augmentation To the U.S. Army (KATUSA) to act as translators and radio operators during the FTX.

The composite, combined ROK/US regiment or brigade is organized into teams or task forces to accomplish the assigned mission. The artillery and tactical air control party (TACP) personnel check to make sure the CFA's glossary of terms for fire support, close air support (CAS), and emergency close air support (ECAS) has been provided down to company level.

The sub-elements then move from their locations. Depending on the mission, enemy, terrain, weather, troops available, and the "real world situation," most of them cross divisional and corps boundaries to get to the FTX area. Some are provided with air cavalry support from the U.S. Army to provide protection during their movement. Similarly, military police man traffic control points at critical choke points to assist and expedite the movement.

During CROSS BUCK, the safety, health, welfare, and morale of the troops are continuously monitored by

the players, controllers, observers, and evaluators. The efficiency of a unit's cold and hot weather training, as well as its field sanitation techniques, can be readily determined.

Participants in the exercise receive periodic, timely comments from controllers regarding their performance and their ability to shoot, move, and communicate. Controllers note whether all elements remain fully operational throughout the exercise and whether the leaders and troops are aware of the mission. Controllers also look to see whether the troops are properly clothed and fed, whether the plan is likely to work, whether the commanders at all levels know what is good, mediocre, and sometimes bad, and whether the commanders clearly know their units' deficiencies and what needs their attention.

Immediately upon completion of the CROSS BUCK exercise, all commanders and staff personnel participate in a critique in which an overview and specific comments are provided. The participants then prepare an afteraction report consisting of a short narrative and separate observations from each, including the strong and weak points of the exercise with recommendations as to which level needs to take what corrective action. The report is collated at each headquarters and formalized at the corps and CFA levels for action, guidance, or submission to the ROK/US Combined Forces Command for assistance at that level.

Through the use of FOG RAIN,

FOG RAIN ALPHA, and CROSS BUCK exercises, leaders and commanders from platoon through corps are making interoperability work. Because of the Republic of Korea's real world situation, interoperability is an absolute necessity if two or more countries are to make the most of their military capabilities as an integrated and cohesive fighting force.

In my frequent visits with the new commanders and troops in the front line divisions, I have been impressed with what I saw. The leadership and the quality of the ROK Armed Forces is superlative. Their commanders are educated, well-trained, and experienced professionals, especially at the battalion and regiment level where most of the commanders have combat experience from Vietnam.

Similarly, the 2d U.S. Infantry Division is an outstanding, highly motivated, well-trained, and mission-oriented fighting force. A soldier who is assigned to the division for a year can expect to do strenuous physical exercise, conduct realistic training near a potential enemy, work closely with an ally, and depart a better professional soldier. Morale is high, as reflected by the record-setting reenlistment rates the division has enjoyed during the past several years. A senior NCO of the 2d Infantry Division has been quoted as saying, "This is the last, best place to soldier."

If you're looking for challenges and professionally rewarding work where the action is, "We'll see you in Korea."



LIEUTENANT GENERAL EUGENE P. FORRESTER, formerly commander of the Combined Field Army (Republic of Korea / U.S.), is now the commanding general of the U.S. Army Western Command in Hawaii.

Growing A Leader

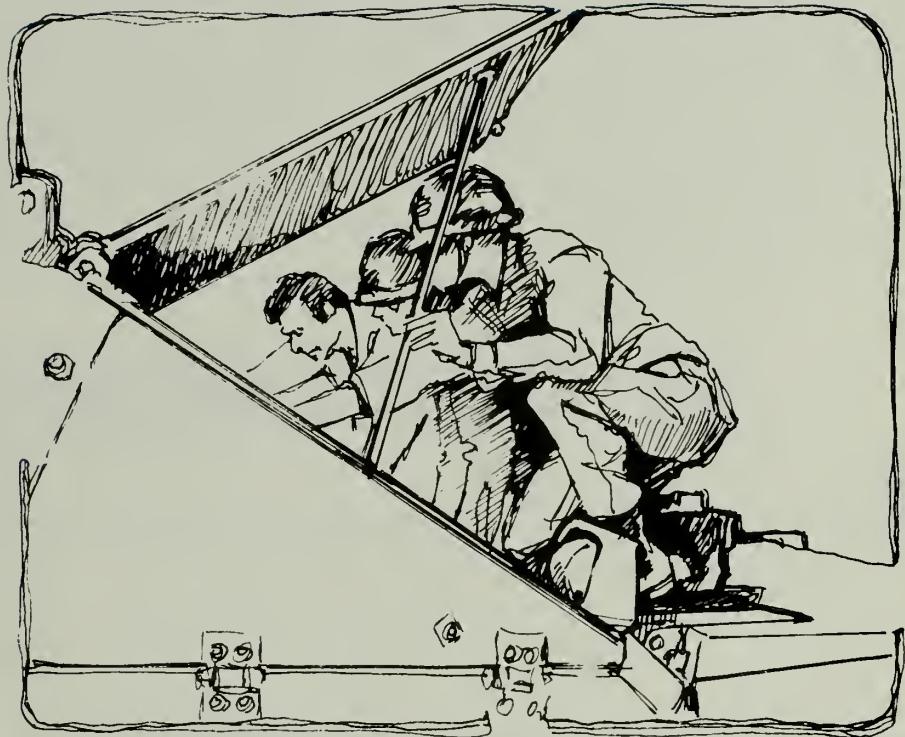


DANDRIDGE M. MALONE

Here's how to grow a leader. Find a bright-orange grease pencil. At 1300 hours, after you've marched your squad or platoon down to the motor pool and got them going on the vehicles in preparation for next week's AGI, then go find a jeep, parked in such a way that there isn't any glare on the windshield. With the grease pencil, write four words on the windshield, one under the other, in letters about an inch high: ANALYZE, ORGANIZE, DEPUTIZE, SUPERVISE.

Now, go out among your young soldiers and find an "able and willing" PFC or SP4. Pick one who seems to be pretty much the "main man" in one of those worthwhile little buddy groups that always seem to hang around together. Walk him back toward the jeep. If it's winter, and the jeep's been running, he'll just naturally gravitate toward the hood. Point to those four words. And right there, at that moment, that man begins to change from an "able and willing" soldier to a "willing but unable" leader.

In no more than 30 minutes, there on the hood of the jeep, tell him what each of those words means, and what you know, from experience, about how to *do* each one. Tell him in terms of "task, conditions, and standards." Then, don't just ask him if he understands. That never works very well. Get him to tell you how he would *do* each one. Take 30 minutes. Then take him back to his crew or



team and put him "in charge." Go about your business, but keep your eye on him — and on his men.

After you've marched your unit back to the company, and as you release them, fall out your young man. In no more than 15 minutes, tell him how well he met your standards for each of those four words. What he did right and did wrong. Don't give him a lot of words about how to correct the wrongs. Instead, use the most powerful leadership tool you've got: set the example. Tell him to watch you for two or three days, and to be prepared then to explain how

you do it — how you ANALYZE, ORGANIZE, DEPUTIZE, AND SUPERVISE.

Next time down in the motor pool, or wherever, go ahead and get the unit to work, then fall out the young man again and take him back to the jeep. In no more than 10 minutes this time have him tell you, now that he's watched you do it right, how he's going to do it. Then, put him back "in charge" again. Finally, at the end of the day, take another five minutes for another critique.

And that, my friend, is how to plant a leadership seed. It'll take you

a total of an hour, one good soldier, and a bright-orange grease pencil. And you can do it, right along with everything else you've got to do.

All it takes is an hour's worth of time to take an able and willing soldier and get him started toward becoming an able and willing leader. The next week, he'll be closer to your standards. It'll be time then to start him reading in that new NCO Guide, and watching other good NCOs, and talking with you about all that. And then you can begin delegating to him some of the easy tasks at the bottom of your list of "100 things to do." That will save you hours of your time. You'll get your time investment back, with interest.

And what do you do with the interest? Plow it right back in again. More teaching and more coaching for the one you just got started, or, plant some more seeds. Pretty soon, your young sprouts will become saplings,

and then you'll have a performance-based reason for deciding who to promote, or who to get started up into the NCO educational system — up into the "pro" ranks.

The simple motor pool example is the essence of unit-level leadership development across the board. Every "able and willing" soldier in your unit is a potential leader. And the example works, not just with a young soldier starting to become a leader, but with any leader who is able and willing — private, sergeant, or lieutenant.

As his leader, part of your job is to keep him moving up toward the next higher level. Coaching and critiquing will take your time. So will sending him to school. So will standing up for him when he screws up. But that time isn't just time "spent." It's invested, and it will come back to the leadership of your unit with compound interest.

Now go scrounge up a bright-orange grease pencil!

DANDRIDGE M. MALONE, a retired Infantry Colonel, is a prolific writer, having published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools including the Armed Forces Staff College and the U.S. Army War College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

A Cottonbaler



MAJOR DANIEL A. RAYMOND JR.

Nestled in the foothills of the Spessart Rhon Mountains in West Germany is a small kaserne that belongs to the soldiers of the 1st Battalion (Mechanized), 7th Infantry. This is no average unit and it contains no average soldiers. They are all "Cottonbalers," descendants of the soldiers who proudly won their nickname at the Battle of New Orleans in the War of 1812.

I have been assigned to five Army divisions and served with many fine soldiers but never have I met a group of young men who believed so much in their heritage and did so much to live up to the history of the most decorated infantry regiment in the United States Army. Over the course of time I, too, began to feel this unit had its own manifest destiny and became a believer in "Cottonbaler

magic." The story of these soldiers should not be left untold.

I am indebted to Theodore Roosevelt and the author of the epic poem "I Am The Infantry," both of whom inspired my thoughts. To the men of the 7th Infantry Regiment, past, present, and future, I dedicate this poem.

I AM A COTTONBALER

Before you stands a damn fine soldier . . . a Cottonbaler, by God! I can be counted on to accomplish any task — any job. I have been in the arena — my face is marred with dust, sweat and blood. I have

known the sweet fragrance of freedom for I have paid the price. I am a damn fine soldier . . . a Cottonbaler, by God!

I earned my nickname at Chalmette in the War of

1812 . . . we stacked cottonbales on the levee with Andrew Jackson and took the fury of the British square. With spent musket and cannon the British retired from the field that day. They had met some damn fine soldiers . . . Cottonbalers, by God!

I remembered the Alamo . . . traveled south and left my mark and my blood at Monterey, Vera Cruz and Cerro Gordo. I marched triumphantly into Mexico City . . . proudly proclaiming . . . Cottonbalers, by God!

The sound of fury from Fredericksburg, Chancellorsville, Chickamauga, and Chattanooga still rings in my ears, and I witnessed the closing acts of this internal strife at Gettysburg. I had fought my brother, but done my job . . . a Cottonbaler, by God!

I helped win the West . . . met a proud adversary after Little Big Horn and can count my fallen comrades against the Creeks, Seminoles, and Utes. I stormed the slopes of San Juan Hill and Santiago and met triumph in the Philippines. I am a Cottonbaler, by God!

My rest was short . . . I crossed over the sea and marched into France. I fought and died at Chateau Thierry . . . stood like a rock on the Marne . . . and smashed onward into St. Mihiel and Meuse Argonne . . . I left behind a lot of damn fine soldiers . . . all Cottonbalers, by God!

Peace at last . . . and rest . . . but not for long. I assaulted the beaches of Morocco and bloodied my tired feet in Tunisia, Sicily, Naples, Anzio, and Rome. I crossed the Channel and returned to France, beat through the hedgerows and fought into the Rhineland, Ardennes, and Central Europe. I saw the horror of war near Dachau, pushed into Nuremberg and saw a dying Third Reich in Berchtesgaden. We led the way . . . Cottonbalers, by God!

I was one of the first to see action in Korea. I

unslung my rifle and hitched up my belt once again. I stopped the Communist Chinese, relieved battered Marines, and kept the corridor open with my blood. I spilled my guts at the Iron Triangle and showed my courage with eight Medals of Honor. They were all damn fine soldiers . . . Cottonbalers, by God!

I fought the tenacious Vietcong through rice paddy, steaming jungle, and forest. I met the determined NVA and rose to every challenge in this country far away. I fought and spilled my blood when others chose to run. I did my duty . . . I honored my country . . . I am a damn fine soldier . . . a Cottonbaler, by God!

Today, I stand on freedom's frontier . . . a fighting team . . . willing and able. When you speak of the Infantry, I am the Infantry . . . my brothers before me, present and those to come . . . all proud soldiers . . . all damn fine soldiers . . . all Cottonbalers, by God!

MAJOR DANIEL A. RAYMOND, JR., an ROTC graduate of The Citadel, is now assigned to the Training Developments Institute at Fort Monroe. Also a graduate of the Command and General Staff College, he has served with the 7th Infantry Division in Korea, with the 3d Infantry Division in Germany, and with the 101st and 82d Airborne Divisions. In addition, he was a battalion senior advisor in Vietnam and served with the G3 for operations, VII Corps.

A BILATERAL STAFF

MAJOR WALTER E. MATHER



Although its exact organization is not prescribed in an Army field manual, the mechanized infantry battalion staff traditionally has used the same organizational structure that is used by brigade and higher level staffs (Figure 1). In a mechanized in-

fantry battalion, the battalion motor officer (BMO) is considered a principal staff officer, and this only reflects his overall importance to the unit's successful operation.

This conventional staff organization appears logical and functional.

But it does not reflect reality, and it certainly does not encourage efficient staff action. The main problem revolves around the actual relationship between the commander and his principal staff officer for training and operations, the S3.

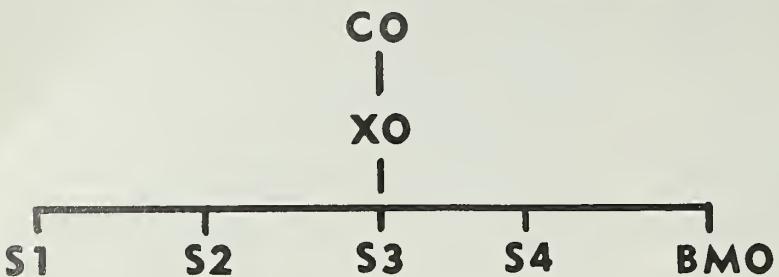


FIGURE 1

The S3 operates closely with his commander in both an operational and a training environment, and there should be no barrier, artificial or otherwise, between them. Unfortunately, in the conventional staff organization there is such a barrier — the Executive Officer — although

Figure 2 should be adopted. I call it a "bilateral staff."

There would be many advantages to this organization. The "dotted line" that now runs between the S3 and the commander would be done away with; the intelligence-operations tie would be firmly knotted; and the

commander would be able to place his most experienced major, regardless of seniority, in charge of the area that most needed supervision. A deputy commander for administration, logistics, and maintenance is also sorely needed in a mechanized infantry battalion, with its more than 150 vehicles and attendant maintenance and personnel problems.

There is one possible disadvantage to a bilateral staff: The deputy commanders would have to coordinate their responsibilities to prevent staff isolation, but that should not be an insurmountable problem. That coordination could be effected by the two majors themselves, or by the commander, if necessary.

All a battalion commander would need to do to implement the bilateral staff concept would be to change the existing battalion rating schemes. No approval would be needed from above, and no existing regulations would have to be modified.

A bilateral staff would not only make for a more responsive staff, it would more accurately reflect the kind of organization many of our mechanized infantry units are now using. I don't know whether this concept could be fitted to light infantry battalions, but there is no question in my mind that it would benefit mechanized infantry battalions in both their garrison and field environments.

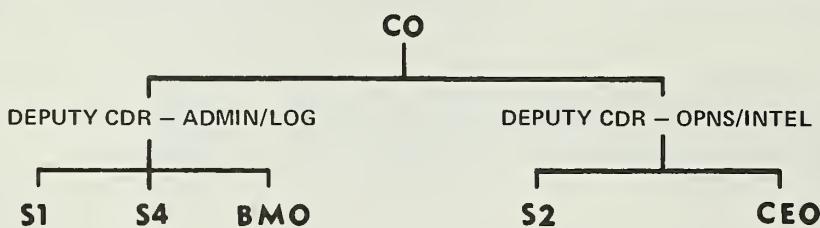


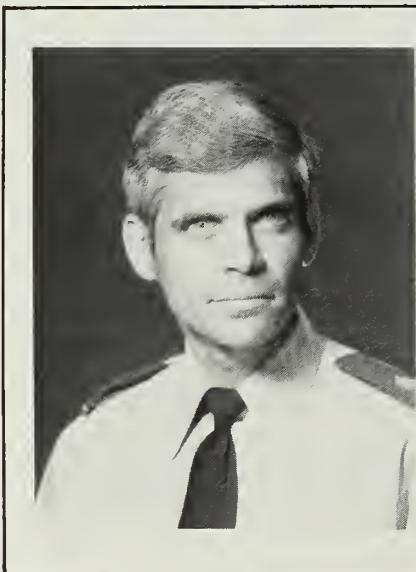
FIGURE 2

those who favor this organization deny that the Executive Officer's position is a barrier. They suggest, rather, that there is actually a "dotted line" that runs between the S3 and the commander and that the S3 can use that "line" to bypass the Executive Officer when he needs to.

In practice, though, that "dotted line" is virtually a solid one because of the realities of training and actual operations, with the S3 and the commander usually working closely together in such places as jump TOCs while the Executive Officer oversees the field and combat trains and, occasionally, the main command post.

To reflect the true situation and, more important, to give the staff badly needed balance, I believe the present mechanized infantry battalion staff organization should be done away with and that the one shown in

internal staff shuffling that now goes on between the S3 and Executive Officer positions based on dates of rank would be eliminated and the battalion



MAJOR WALTER E. MATHER
is a 1967 graduate of the U.S. Military Academy and holds a master's degree from the Georgia Institute of Technology. He served two tours in Vietnam and in several infantry assignments with the 3d Armored Division in Germany. He is now assigned to the Office of the Deputy Chief of Staff for Operations in Washington, D.C.

Stop Shuffling S4s



MAJOR JOHN L. MORRIS, JR.

Most battalion commanders will tell you that a knowledgeable S4 is worth his weight in gold because he knows the importance of logistics to the success of any mission. Many of those same commanders, though, will not hesitate to change his S4 on the slightest pretext, leaving the S4 sergeant to work for yet another in a long series of officers with whom he has served during the past few years.

This confusing practice of switching S4 officers, no matter how valid the reason may seem at the time, has been the downfall of a number of good battalions. I am sure that in most cases the commanders of those battalions would have been far better off if they had kept the same officer in the S4 position for at least a year.

There are two good reasons why the S4 officer should retain his job for a year: property accountability, and financial planning and budget execution.

A number of recent changes in the Army's property accountability procedures requires the S4 to be personally familiar with the new automated supply procedures so that he can properly manage the unit's relief-from-responsibility system. It is not enough for the S4 to merely understand the printed regulations; he must make certain that his battalion and company commanders are also aware of their property responsibilities.

As a report of survey officer, I watched a battalion commander, the best tactician in our brigade, count mattresses late one night. He had assumed that his new S4 had control of the battalion property situation.

When I talked with each of his previous three S4 officers, they said they had known a problem existed, but had left the staff before they could do anything about it. Each had become a company commander before he had learned enough to control the battalion's property and, thereby, to avert disaster for the battalion commander. The average tour of an S4 officer in that battalion had been four months. Unfortunately for that commander, understanding and managing a battalion property system takes time, and he hadn't given his S4s the necessary time.

The recent trend toward decentralized budget planning and control of funds has made S4 officers even more responsible for their units' financial status and annual budgets. Even if he has little or no formal training, the S4 must now plan for and spend a substantial annual budget. He must make decisions and recommendations every day on the expenditure of organizational funds, but he has limited tools with which to analyze and define his requirements. The development of automated systems to help him, such as the training management control system (TMCS) and similar devices, simply have not kept up with the S4's needs in this area.

At least two important aspects of unit logistics, then — property accountability and funds management — require a degree of continuity in the S4 position. An officer assigned as a battalion S4 should be retained in his position for at least 12 months. Other aspects of battalion logistics, such as supporting tactical operations

and staff coordination, would also benefit from this continuity.

An effective logistics operation is often the difference between success and failure in training and in combat. It is imperative, therefore, that an S4 stay in his job long enough to learn it well and perform it effectively. This is a fact that many battalion commanders do not seem to be able to grasp. The ones who do not will probably end up counting mattresses in the middle of the night.

MAJOR JOHN L. MORRIS recently completed the U.S. Army Command and General Staff College course and is now assigned to the Defense Systems Management College, Fort Belvoir, Virginia. A 1969 graduate of the U.S. Military Academy, he also holds a master's degree from Pepperdine University. He served one-year tours as an S4 in the 1st Battalion, 327th Infantry, and in the 2d Battalion, 504th Infantry, and was the Training Management Officer, G3, of the 82d Airborne Division.



TAMMS

let's work smarter

CAPTAIN JOSEPH B. WISMANN

Do you remember the last time your unit stood its Annual General Inspection (AGI)? Did your once proud unit degenerate into a mob of panic-stricken soldiers preparing to defend themselves against a seemingly unbeatable foe? Were there sleepless nights, tensions in the air, and feelings of utter and complete relief when it was over?

If so, these hectic preparations and the degeneration of your organizational structure were indicators that your systems were not working as well as they should have been. And in all probability, these indicators were associated with your maintenance and maintenance management efforts.

Most of us would agree that the AGI is a fair indicator of a unit's status regarding maintenance management. Opinions may differ regarding the usefulness of roadside spot checks, roll out inspections, maintenance assistance and instruction team (MAIT) visits, and the numerous other maintenance inspection techniques used in the Army. But such inspections do indicate how well The Army's Maintenance Management System (TAMMS) is working — or more correctly, has been working — in a unit during a particular period of time.

It seems safe to say that since most units successfully complete these inspections, visits, and checks, TAMMS does work at company level. But as any company or battalion commander will tell you, there are more than enough counseling sessions, "bloodlettings," and reply-by-indorsement letters to indicate that the system is not working as well as it could.

Some people have suggested that the combat arms should be relieved of their maintenance and maintenance management responsibilities. They propose that the Army do away with the organizational maintenance structure as we now know it and turn the job over to service teams from the direct support units. Maintenance in the unit would be limited essentially to operator maintenance. At the organizational level, the combat arms units would no longer need their mechanics, tools, and diagnostic equipment. The commanders would be free to concentrate on their combat and mission-oriented training. During war time, the mobility of a combat unit would not be hindered by a need to transport maintenance shops and unserviceable vehicles.

As attractive as this concept may sound, I don't think it is feasible. For example, who would sign for and control a unit's vehicles? Who would insure that the support teams were always responsive to the combat unit's requirements as dictated by its operational and training schedules?

Even if these problems could be solved, a company commander could still expect to have certain maintenance management responsibilities. In fact, barring any revolutionary change in Army policy, maintenance and maintenance management will continue to be a command responsibility right down to the company level.

Accordingly, one of the first things we can do to make TAMMS work better in our companies is to take advantage of every learning opportunity. The opportunities

vary from post to post, but the soldiers can learn about TAMMS from courtesy Inspector General visits, diagnostic evaluations, and maintenance evaluation team visits. An overwhelming majority of units sincerely appreciate visits of a courtesy or instructional nature. Unfortunately, too many companies do not make a real effort to learn from such visits.

A company commander might also consider his interpretation of the 11th Commandment in an infantry unit — "Training is top priority." Too often, commanders interpret this to mean field training involving only the tactical maneuver elements. If they think about maintenance at all, it usually means that their maintenance sections will get a workout at performing in the rain, mud, snow, or sleet. While this is important, there is a lot more to it than meets the eye, especially the eye of a company commander whose only contact with his maintenance section in the field may be to check on the status of his jeep. His maintenance section may be letting the TAMMS paperwork slide until the field training period is over; it may be stockpiling unserviceable equipment instead of evacuating it quickly. Although the section may shine in the commander's eyes for the support it renders on a particular field exercise, it may not be building the right kind of working habits that would let it support the company over the long haul. And he should also look at the maintenance work being done by his arms people, his communications people, and his CBR people in the field.

OTHER CONSIDERATIONS

In garrison, certain other considerations have to be taken into account. Does the unit's training schedule allow time for any maintenance training? If it does, is the training actually conducted, or are the maintenance people too busy doing their jobs to learn how to do them correctly? Virtually everyone in a company needs to know something about maintenance, because nearly all of them have some responsibilities under TAMMS. The vehicle driver and the rifleman, for instance, must report any problems with their vehicles, weapons, communication gear, and CBR equipment. They must know whom to report to and which forms to use. The people who receive this information must know how to record it, assign priorities for its maintenance work and any needed repair parts, and, most important, they must know how to follow up on the needed actions. And the company commander must understand TAMMS so that he can make certain the system is working from bottom to top.

There are some things the Army can do better that would help out in the area of TAMMS training. All of the TAMMS "implementors" — the E-3s and E-4s who do the stubby pencil work and the actual nut tightening or oil changing — must know that, in the Army, maintenance management is a system. PLL clerks, for example, often do not know when they should use a high priority designator or a lower one on their requisitions. They have never really learned the reasons for the various

priorities. And they often do not realize that this one simple entry can affect all of the support channels and eventually determine the mode of transportation used to ship the repair parts they have requisitioned.

It is probably too much to expect our training centers to make system managers out of new recruits. But it is true that the U.S. soldier does his job better if he understands why he is doing it.

This need to understand TAMMS as a system should not be limited solely to the PLL clerk and the dispatcher, because it also applies to our 11Bs and 11Cs; they are the ones who have to do the required organizational maintenance on their weapons and other equipment. And in spite of the authorizations on most modified tables of organization and equipment (MTOE), the job of unit armorer usually goes to an 11B or an 11C. When this happens, that soldier's introduction to TAMMS is likely to be a confusing stack of forms left behind by the previous armorer, which is not the way to convince him that we have a good system of maintenance.

TAMMS supervisors within the unit should also be well educated about the system. The company executive officer, for example, should be an expert on it.

HELP

In recent years, the Army has provided a considerable amount of help on TAMMS to personnel at the company level. Some log book forms have been eliminated, and many of the administrative recording and reporting requirements have been shifted from the operator level. But it is still difficult for many people to grasp the idea that maintenance management is a system. They are often intimidated by the number and complexity of the forms still being used. To these people, unfortunately, learning TAMMS is comparable to learning a foreign language.

We may have to wait a while for the Army to come up with some training programs that will help our TAMMS implementors interpret that language. We may also have to wait for an updated version of TM 38-750, which explains the forms and how to fill them out. But while we are waiting, commanders can help their units overcome these difficulties, at least partially, by using the programs that are available more efficiently. Most installations have established short courses to instruct TAMMS implementors and supervisors in the system, in the PLL, and in a number of other skills. Some even have courses for the unit armorer and the CBR NCO. A company commander should send as many soldiers as he can to these courses; doing without a few of his soldiers in the unit for a week or two can pay off in the long run.

Personnel turbulence, of course, is also hazardous to the health of TAMMS at the company level. The Army is well aware of this problem and is actively seeking ways to stabilize its personnel.

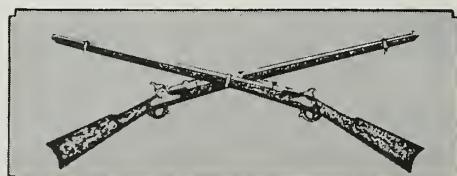
In the meantime, a company commander can ease the problem by forecasting his needs for a new armorer, or a new CBR NCO, or a new PLL clerk, or for a new communications chief and get the new people into the available courses of instruction as early as he can. He must also provide as much overlap as possible in the various jobs.

But leadership is probably the most complex problem any company commander faces in dealing with TAMMS. He should first review the technical capabilities and the quality of his company's leaders. If the leaders are not up to par in TAMMS, the commander must correct this problem before going on. Then he and his leaders need to apply their knowledge to instructing and supervising the TAMMS implementors and to establishing a system of reward and punishment. His one goal should be to motivate his people to excel in TAMMS.

Making TAMMS work well at the company level is not an easy task. It requires the careful attention of everyone in the unit, from the company commander to the newly arrived private. Everyone must accept the fact that maintenance management is the unit's responsibility, and they must realize that that responsibility will remain at the company level for a while. The unit is going to have to put up with less than enough people, with a high turnover among those it does have, and with conflicting training and other priorities. But if everyone keeps TAMMS in mind when they address these problems, the improved readiness of their equipment and a sterling performance on their next AGI will be well worth the effort.



CAPTAIN JOSEPH B. WISMANN, an Infantry officer, is a 1972 graduate of the U.S. Military Academy. He has served in several assignments with the 2d Division in Korea and with the 2d Ranger Battalion at Fort Lewis, Washington. When he prepared this article, he was attending the Logistics Executive Development Course at Fort Lee, Virginia.



afghanistan

FIGHTING
IN

LIEUTENANT PAUL H. VIVIAN



Since the Soviet invasion of Afghanistan in late December 1979, Western military observers have speculated on the nature of the tactics the Soviets have employed in that campaign. Most Western observers argue that the fighting in Afghanistan presents the Soviet forces with a special challenge. Since virtually the entire Soviet army is equipped and trained for conflict on the plains of Europe, combat in the mountains of Afghanistan is bound to test strenuously Soviet equipment, tactical doctrine, and men.

While it is difficult to piece together what is happening in Afghanistan without being on the scene or without access to photo or signal intelligence, it is still possible to glean some hints from open sources. One such source is the Soviet magazine, *Voennyi vestnik* (Military Herald), a monthly journal concerned primarily with company and platoon tactics, which is published by the Soviet General Staff.

It was an incident of some note, then, when in February and March 1980, just two and three months respectively after the Soviet invasion of Afghanistan, *Voennyi vestnik* published two articles on the tactics used by Soviet airborne units in mountainous terrain. This is especially significant because among the key units involved in the invasion of Afghanistan was the Soviet 105th Airborne Division together with units of the 103d and 104th Airborne Divisions.

Several other articles appeared in *Voennyi vestnik* during 1980 that, while not concerned exclusively with the tactics of airborne units, were devoted nonetheless to tactics in mountainous regions. To the casual Western eye, these articles do not appear to be concerned with Afghanistan. Indeed, they ostensibly refer to World War II or to training exercises. But such is typical Soviet practice; they often try to obscure an issue by talking indirectly about it.

No doubt all the articles that appear in *Voennyi vestnik* are carefully chosen. Not too surprisingly, they describe victories and not defeats, and they emphasize the positive over the negative. Even so, a close study of them can be of value to a Western observer; at least he can get some idea of what aspects of Soviet tactical doctrine are most successful. Such articles also give the reader an idea of some of the capabilities of the Soviet army as well as the problems it faces. (Most of these observations may be considered valid provided the reader is also aware of the use of the "disinformation" process by many Soviet authors.)

Of the several articles that have appeared in *Voennyi vestnik* since 1979 on fighting in mountainous terrain, one in particular warrants close analysis. Written by Guards Captain B. Koziulin and officially entitled "A Company Seizes a Command Point," the article describes a classic encounter between an airborne company and what was quite likely only a guerrilla outpost.

The protagonist of the article is Guards Senior Lieutenant Iu. Podkovanov, who is identified as the commander of the 2d Airborne Company of an unidentified battalion, regiment, and division. The major characteristic of the operation described was that it took

place at an altitude of 506 meters, in what the Soviets classify as a low mountainous region.

The operation properly began the evening before the company was to be deployed when Lieutenant Podkovanov received his operations order. He was instructed to seize and destroy a command point and aircraft early warning center located approximately 20 kilometers southeast of the city of Grigor'evka (a pseudonym?). Once he accomplished that task, he was to rendezvous with the main body of his parent battalion at an undisclosed location. According to the available intelligence reports, the objective was defended by a reinforced motorized rifle platoon. Moreover, the enemy was deemed capable of reinforcing his positions within 50 to 60 minutes after becoming aware of an enemy's presence. To help him accomplish his mission, Lieutenant Podkovanov's company of three platoons was to be reinforced with a detachment of sappers. Finally, he was told that his unit must jump and be on its drop zone (DZ) by 0700 the next morning.

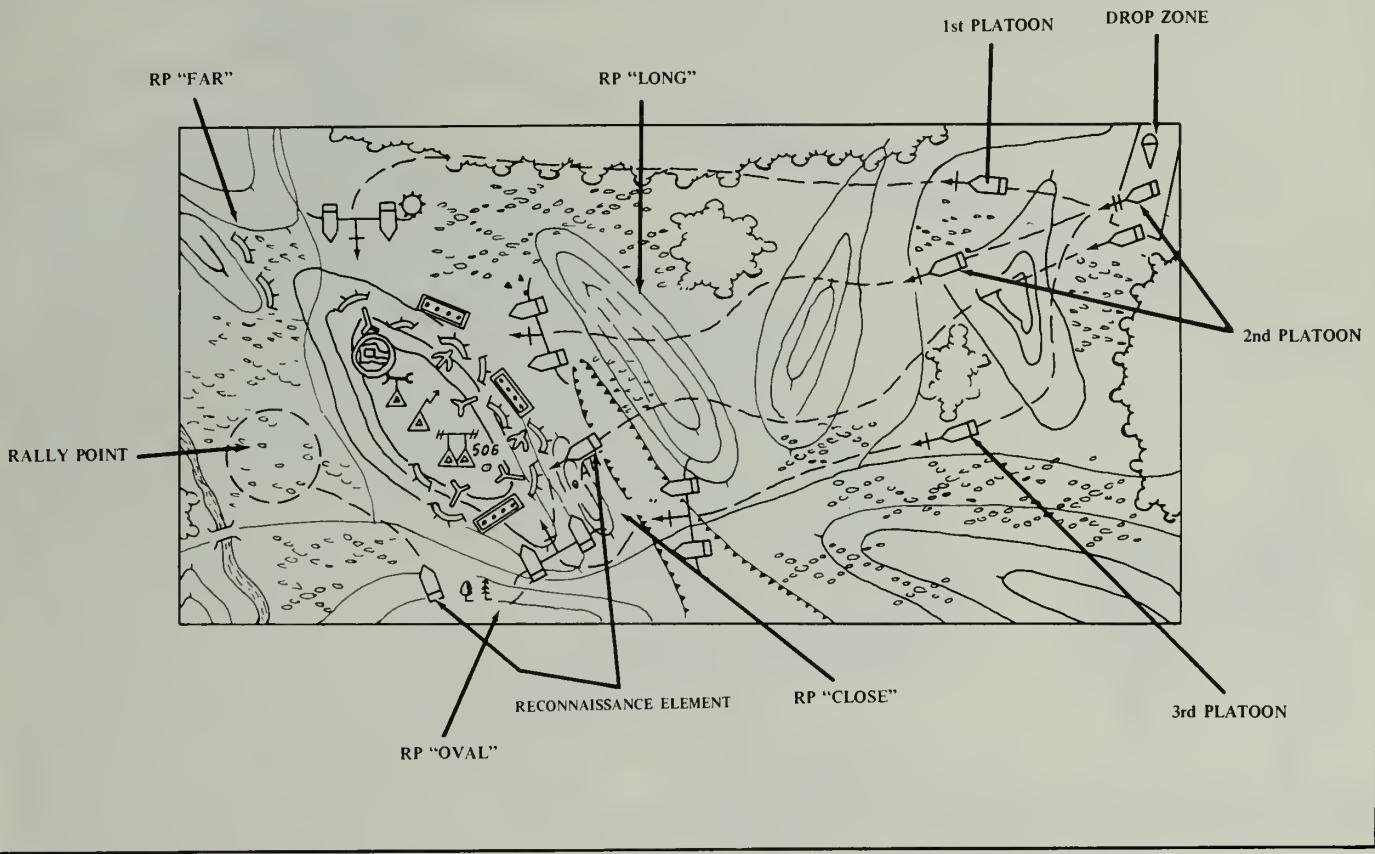
ANALYSIS

Lieutenant Podkovanov's first step was to study aerial photographs of the enemy's command point and to conduct a map analysis of the terrain around the objective. Apparently, judging from the aerial photographs, Lieutenant Podkovanov determined that all avenues of approach were covered by at least some defending fires and seemed to be mined as well. The eastern slope of the command point was the best defended with machineguns and light antiarmor weapons. Bearing in mind the principle of surprise and the fact that the objective could be quickly reinforced, Lieutenant Podkovanov determined that it was essential for his unit's drop zone to be close to its objective. Consequently, he selected an area northeast of the command point as the DZ. The terrain between the objective and the DZ was hilly and would help to conceal his unit's approach to the objective.

After selecting his drop zone, Podkovanov then worked out the details of his attack. He decided to attack simultaneously from the north, east, and south. He also selected as his rally point a clump of trees to the west of the objective. Once the company regrouped, it was to proceed to its rendezvous with the rest of the battalion.

An intriguing question arises at this point in the article. BMDs, armored fighting vehicles specially designed for airborne units, were used in the operation. The article is explicit on this point. But when was the decision made to employ BMDs in the operation? Was the decision in the original operations order, or did the company commander, Lieutenant Podkovanov, make the decision? Perhaps the use of BMDs is such a standard part of the Soviet's operation doctrine that their use was assumed. Unfortunately, this question must be left unanswered.

When his operations planning was completed, Lieutenant Podkovanov summoned his platoon leaders. He gave them his operations order, maps, and aerial photographs



and showed them a sand table of the enemy's command point.

According to Podkovanov's operations order, the 1st Platoon, after landing and regrouping, was to serve as the company's right flank and move westward to the burial mound north of the objective (see map). At this point, the 1st Platoon was to deploy from its march column and attack up the northwest slope of the objective. Once on the objective, the platoon was to position itself so as to prevent the approach of enemy reserves from Grigor'evka.

The 2d Platoon, with its attached section of sappers, was to serve as the center of the company and after landing and regrouping was to move directly westward using the hollow as best it could for cover and concealment. Upon reaching the northern extremity of the hollow, the 2d Platoon was to deploy from its march column and attack up the eastern slope of the command point.

The 3d Platoon, minus one squad, after landing and regrouping, was to serve as the left flank of the company. It was to travel westward up to the point code-named "Close," from which it was to swing northward and attack up the southern slope of the command point. The 3d Platoon, like the 1st and 2d Platoons, received instructions not only to seize the objective but to destroy all objects and equipment on it.

A key role in the operation was given to the detached squad of the 3d Platoon. This squad, together with two attached engineer elements, was to carry out a reconnaissance from the drop zone to "Close" and then along the southwestern slope of the command point. After the

command point had been seized and destroyed, this squad was to be prepared to move out to the bridge that crossed the river "Fast." The squad's primary responsibility, however, was to watch for the approach of any enemy reinforcements.

Lieutenant Podkovanov emphasized to every platoon leader that it was vital for the company to conduct its approach, reconnaissance, and attack within 30 minutes.

Finally, before dismissing his platoon leaders, Lieutenant Podkovanov issued signal information. The signals for the attack would be the word "Thunder" on the radio and a green flare; when the objective was prepared for destruction the signals would be "Lightning" and a red flare; the destruction of the objective would be "River" with a white flare; and the latter would also be the signal to evacuate the objective.

Presumably the rest of the evening was spent briefing the airborne troopers, checking equipment, and tying up any remaining loose ends.

THE ATTACK

The next morning at the appointed time, 0700, Lieutenant Podkovanov's 2d Airborne Company carried out its planned jump. Immediately upon landing, the reconnaissance element under the command of Guard Sergeant V. Leonov left the drop zone and proceeded to "Close" to conduct a reconnaissance of the objective.

Upon receiving a report from all his platoons, Lieuten-



ant Podkovanov ordered his company to move out to the objective. As the company approached the height "Long," he received a report from the reconnaissance element. Sergeant Leonov reported seeing radio antennas on the objective. He also passed on additional details on the emplacement of machineguns on the objective.

After evaluating Leonov's report, Podkovanov concluded that the approach from the east offered his soldiers the best cover. He then refined his orders to his platoons. In particular, the 3d Platoon received instructions to travel through the hollow and attack from the southern slopes of "Close" from the direction of the house.

On the signal "Thunder," the attack began. Shortly thereafter, though, the reconnaissance element located near the position "Oval" reported seeing three enemy APCs on the road from Petrovsk. Lieutenant Podkovanov did not give any thought to breaking off the attack. Rather, he ordered the reconnaissance element to cover the left flank of the 3d Platoon and to destroy any approaching enemy vehicles. This the reconnaissance element did, using light infantry weapons and machineguns. Unfortunately, at this point in the narrative the details of the battle become sketchy. But we do know that the 1st Platoon reached its objective first, followed by the 2d and 3d Platoons. The company suffered only one loss, a BMD from the 1st Platoon.

Immediately after destroying all the objects and equipment on the objective, Lieutenant Podkovanov's three

platoons met at the predesignated rally point. It is unclear whether any attempt was made at this time to redistribute ammunition, to take care of the wounded, or to communicate with battalion headquarters. Presumably some steps along these lines were taken. Yet, it is clear that at the rally point, Lieutenant Podkovanov relieved the detached squad from the 3d Platoon of its reconnaissance and screening duties and sent a squad from the 2d Platoon to take its place. After completing this task, the company left the rally point for its rendezvous with the main body of the battalion.

At this point in the article, the Soviet author — Captain Koziulin — announces that the entire article has been a deception. It does not really describe a training exercise employing BMDs, Captain Koziulin declares. Rather, it describes a real battle that took place in the Carpathian Mountains during World War II involving the 615th Rifle Regiment of the 167th Rifle Division. In the place of BMDs, he tells us, we should read tanks.

Despite this last-minute attempt to deflect attention from what is almost certainly a description of a battle in Afghanistan between Soviet airborne troops and Afghan guerrillas, Captain Koziulin focuses his attention on the lessons that can be learned from this skirmish.

First, he argues that this battle teaches that an airborne commander must choose a drop zone that allows attacking troops to move quickly and secretly to their objective. Secondly, he stresses that in moving to the objective it is necessary to keep the enemy guessing as to where the at-

tack will be made, and that the attacking forces should hit the enemy where he least expects it. Finally, a reconnaissance of the terrain and the objective should be conducted from high ground, if at all possible.

Captain Koziulin's observations are not especially profound. Indeed, the entire conduct of the operation described in the article, on the surface, seems rather ordinary. Yet, looking at it more closely, there is much that the Western military observer can learn from it about Soviet military operations in mountainous terrain:

- Most significantly, the Soviets do not hesitate to employ BMDs in mountainous terrain, an area where many American commanders would be reluctant to commit mechanized forces. The vulnerability of armored vehicles increases in mountainous areas because their maneuverability is limited by rocks, sharp drop-offs, and forest vegetation. Yet the Soviets seem prepared to forfeit maneuverability as long as the armored vehicles can provide mobility. The Soviet commanders apparently reason that any increase in casualties caused by limited maneuverability can be compensated for by a decrease in the number of casualties that a mobile force can achieve through speed and surprise.

- While the Soviet analysis of the operation stresses the importance of choosing a drop zone close to the objective, in reality Lieutenant Podkovanov's choice of a drop zone would be considered distant by U.S. standards. Since U.S. airborne troops do not have air-droppable armored vehicles, U.S. commanders must choose drop zones either on the objective or immediately adjacent to it. Soviet airborne troops with their BMDs have the option of landing some distance from the objective and launching a coordinated attack from several directions.

- Rather surprisingly, Lieutenant Podkovanov did not employ any artillery preparation on the objective before attacking. While the objective may have been out of range of the usual 122mm, 130mm, and 152mm weapons, the lieutenant chose not to use any of the 120mm mortars usually found in Soviet units. Apparently, he felt the element of surprise would be lost with an artillery preparation.

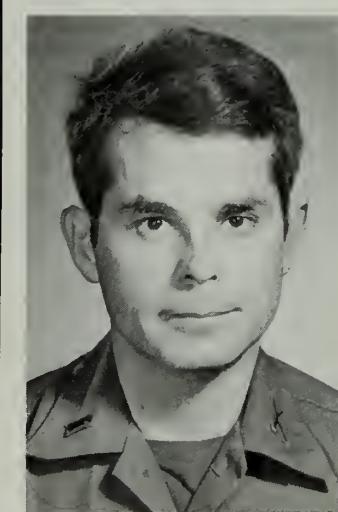
- Lieutenant Podkovanov and his superiors apparently believed that a three-to-one ratio in favor of the attackers was enough to defeat a dug-in enemy in mountainous ter-

rain, provided the attacking forces achieved surprise. This is a risky assumption, especially given the nature of the terrain. Most U.S. commanders would probably prefer a more favorable ratio when attacking a dug-in enemy, especially if the enemy were well trained and armed.

- Judging from the responsibility given to the reconnaissance-screening unit commanded by Sergeant Leonov, Soviet NCOs seem to have much more responsibility and freedom of action than we in the West commonly believe.

- It is generally believed in the West also that Soviet officers are set-piece commanders. But if even a small portion of the Soviet officer corps is like Lieutenant Podkovanov, our picture of the Soviet commander as a man thrown into a fit of confusion at even a slight deviation from the plan is a dangerous and misleading simplification.

Finally, the study of articles of this sort from the open Soviet press is of value to U.S. combat leaders, NCOs as well as officers. While such articles might not contain any great revelations, they do show general operational methods, self-perceptions, national attitudes, and thought patterns found in today's Soviet Army.



LIEUTENANT PAUL H. VIVIAN is assigned to the 152d Infantry, Indiana Army National Guard. He has completed the Infantry Officer Basic Course and the Military Intelligence Officer Qualification Course. He holds a PhD in Russian History and was an International Research and Exchange student to Moscow State University, USSR, in 1974-75.





CORREGIDOR

an airborne assault

MAJOR CHARLES E. HELLER

During World War II a significant number of the airborne assaults that were attempted either failed entirely or did not justify the high percentage of casualties that resulted from them. A few of them, however, did achieve varying degrees of success. The most successful, and perhaps the most spectacular airborne combat assault of the global conflict, occurred during the latter stages of the war in the Pacific on the island of Corregidor.

The success of that operation offers some lessons that may be valuable in the future employment of airborne forces.

SITUATION

On 9 January 1945, elements of the Sixth U.S. Army landed at the Lingayen Gulf in the north of Luzon, the major island in the Philippine chain. These landings were followed by secondary amphibious assaults on the east coast of Luzon, above the Bataan Peninsula at San Antonio, and south of the entrance to Manila Bay, at Nasugbu. By the end of January the capture of Manila had become crucial because the engineers could not construct enough port facilities at the Lingayen Gulf.

The Japanese forces in the city had received orders from General Tomoyuki Yamashita to abandon it, but Admiral Sanji Iwabuchi, commander of the Manila Defense Force, had disobeyed. As a consequence, Sixth Army units encountered stiff resistance in the city and found Japanese garrisons still manning the harbor fortifications.

Corregidor, known since pre-war days as the Rock, held no value for the Japanese in their defense plans, but until it could be neutralized it posed a threat to any Allied shipping that might try to enter Manila Bay. Well before the invasion of Luzon, the Sixth Army commander, General Walter Krueger, and his G3 section had considered the possibility of capturing the island. As a result, when General Douglas MacArthur informed General Krueger of his desire to take Corregidor by amphibious or airborne assault or by a combination of the two, it took General Krueger's G3 section only two days to come up with a plan. It was to be conducted by elements of the Sixth Army, code named Rock Force.

ROCK FORCE

The 503d Regimental Combat Team (Parachute), supported by elements from the 462d Parachute Field Artillery Battalion and a company from the 161st Airborne Engineer Battalion, would make a parachute assault. An amphibious assault would be conducted by the 3d Battalion, 34th Infantry, and by the 151st Regimental Combat Team (RCT). Aircraft of the 317th Troop Carrier Command would transport the airborne forces while the 592d Engineer Boat and Shore Regiment would be responsible for landing the infantry.

This force, the planners believed, would be adequate to deal with the Japanese garrison on Corregidor, which they estimated at no more than 850 to 1,000 men. This turned out to be a significant intelligence error; there were in fact more than 5,000 Japanese on the island under the command of Naval Captain Akira Itagaki.

To the planners, the island of Corregidor resembled a tadpole with an oversized head facing east out of the bay. The widest point measured one and a half miles. The end abruptly narrowed to a softly curving tail. The total length of the island was about three and a half miles. The head — except for three steep ravines which led to the sea — had cliffs that plunged to the narrow beaches from heights of 400 to 500 feet. This part of the island, known as Topside, had a relatively flat surface.

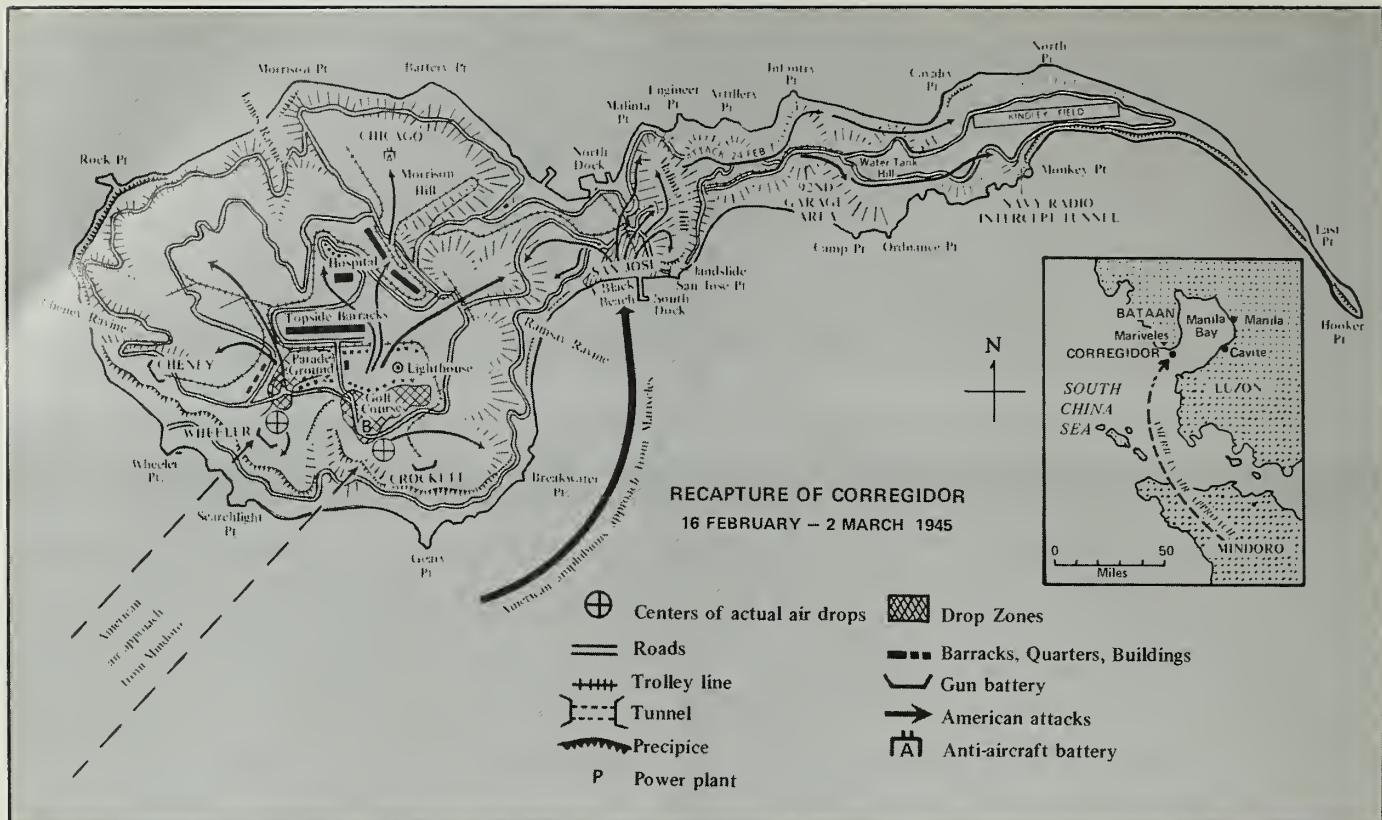
The bombed-out shells of the buildings and gun emplacements that had been built and occupied by U.S. forces before the war marred the island's surface, and amid the rubble were splintered trees and bomb craters. The only areas that were moderately clear of debris were an old parade ground and a golf course. The parade ground was only 325 yards long and 250 yards wide, while the golf course was 350 yards long and 185 yards at its widest.

At the neck of the tadpole, called Middleside, steep slopes led to a saddle, some 500 yards wide and about 100 yards above sea level. This area, Bottomside, contained the ruins of a small village, San Jose, as well as docking facilities on the nearby beaches. Black Beach, on which the amphibious landing would be made, was to the south. Malinta Hill with its pre-war tunnels was west of the saddle. Then, from Malinta, the terrain gradually sloped to the tip of the island not more than 150 yards above the sea. A single-strip airfield occupied a portion of the wooded terrain at the tip.

The planners wanted to use airborne forces to obtain surprise, so they made two assumptions: The Japanese, having taken the Rock themselves by an amphibious assault in 1942, would not expect an airborne invasion; and the enemy, scanning the sea approaches from underground bunkers, probably would be distracted by the approach of the amphibious assault forces and would not see the paratroopers in time to react to them.

The selection of drop zones (DZs) thus became of primary importance. Colonel George M. Jones, who commanded the 503d RCT, after making an aerial reconnaissance, recommended Kindley Field, a small landing strip at the tail of the tadpole. Because of the rugged terrain and the debris and ruins on the rest of the Rock, he believed a jump anywhere else would cause a high percentage of injuries, enough to render his force ineffective. General Krueger, however, vetoed the suggestion, explaining that a drop on Kindley Field would not secure key terrain. Besides, troops dropping there would draw as much fire as if they had come from the sea. (In 1942, when the Japanese had landed by sea in this area they had suffered many casualties.)

The only other way to achieve surprise, therefore, was to land the troops on Topside. But steep cliffs to the



south and west bordered the area, and a strong or shifting wind could bring the paratroopers onto the cliffs or into the sea below. The advantages of a landing on Topside outweighed the disadvantages, though, and the parade ground was designated DZ "A" and the golf course, DZ "B."

The troops of the first serial were to secure and hold both DZs in preparation for the second lift. With the additional troops they would then clear Topside, provide covering fire for the amphibious assault, and then establish contact with the 3d Battalion, 34th Infantry. The entire force would then conduct mopping up operations.

MAIN AIRBORNE ASSAULT

At 0700 on 16 February the C47s of the 317th Troop Carrier Command rose from airfields on Mindoro, circled, and then headed in a wide westerly sweep north to Corregidor. A half-hour later a second flight followed bringing the total to 51 aircraft. At 0830 the first wave of aircraft was ordered to proceed with the drop.

Two columns of C47s, one for each DZ, flew on a course from southwest to northeast, and the "V" formation used in the flight from Mindoro broke into an "in trail" formation. Aircraft trailed 600 feet apart at a speed of 100 miles per hour, flying 650 feet above Topside. Given that speed, each aircraft had only ten seconds over its designated DZ, a time that did not allow all of the troopers to exit in one pass. This meant that each plane had to make three passes, releasing a stick of six to eight men each time.

Because of the prevailing winds over the bay the jumpers could not use a prearranged "go" count when the green light flashed on. Instead, the pilots counted seconds after passing the "go" point. This became especially necessary when the wind speed increased. Also, since the approach headed into the wind, an increased count allowed the troopers to drift back onto the DZs instead of falling short onto the cliffs or into the bay. Accordingly, the jumpmasters paid attention to the green "go" light and not to the DZ below. A verbal warning indicated ten minutes from the objective, and when the aircraft was three minutes out the red light went on.

As the first stick of chutes blossomed from the doors, the command aircraft noted that the twelve-knot wind from the north-northeast was causing the troopers to drift short of the "go" points and onto the cliffs. As planned, the pilots increased the count, first to six and then to ten seconds after the "go" point. As a consequence, troopers left the aircraft past the DZ. The pilots, concerned about getting their troopers within the DZ, cut their airspeed from 100 miles per hour to 85 and dropped from a height of 650 to 500 feet above Topside. According to the pilots, jump discipline, except in one or two cases, was excellent. As it turned out, 90 percent of the men who landed outside the two DZs fell short either on the cliffs or into the sea, where PT boats braved Japanese fire to pick them up.

The airborne assault came as a complete surprise to the Japanese. The first troopers drew no fire as they floated down at 0833, three minutes late, and only sporadic rifle and machinegun fire met those who followed. The first lift consisted of the 3d Battalion, 503d Infantry; Battery C and a platoon of Battery D, 462d Parachute Field Ar-

tillery; Company C, 161st Airborne Engineer Battalion; and a portion of the regimental headquarters and headquarters company.

By 0945 Colonel Jones had assembled the men of the first serial. They had three missions: Secure the DZs, prepare to secure Topside after being reinforced by the second serial, and establish positions to provide supporting fire for the infantry landing on Black Beach. All of these missions had been accomplished by 1028 when the first of 25 landing craft, carrying the 3d Battalion, 34th Infantry, lowered their ramps on Black Beach. Distracted by the parachute assault, the Japanese ignored the first four waves. By the time they reacted, tanks of the 603d Tank Company were already ashore, and at 1100 several companies of the 34th Infantry stood on top of the key terrain feature, Malinta Hill.

At 1240, 25 minutes late, the second aerial serial, made up of the 2d Battalion, 503d Infantry; Battery B, 462d Parachute Field Artillery Battalion; Service Company of the 503d; and the balance of the headquarters floated to the ground, meeting only scattered sniper fire. By nightfall the United airborne elements had enlarged the existing perimeter while several companies moved down Middleside to within 250 yards of the 34th Infantry.

SECURING THE ROCK

The clearing of Corregidor consisted of numerous small-unit actions against disorganized and scattered Japanese defenders. When a jump on 17 February was cancelled, the 1st Battalion, 503d Infantry, reached Bottomside by landing craft to aid in clearing out the remaining bunkers, pill boxes, and tunnels.

The most serious challenge to the U.S. occupation of the island came on the 24th when more than 600 Japanese launched a counterattack, but more than half of them succumbed to the artillery and small arms fire of the infantry and dispersed.

On 26 February at 1100 a tremendous explosion, a suicidal *tour de force*, marked the end of the organized resistance. On 2 March Colonel Jones reported the island secure.

Jump casualties had been amazingly light. As it turned out, only 25 percent of the men in the first drop had jump-related injuries. Even with the increasing wind, the second drop had even fewer injuries as the pilots became more adept at dropping their sticks. Out of the 2,019 paratroopers who jumped, 279 suffered jump-related casualties, or 13.8 percent. Twelve died; one man's chute failed to deploy and the remaining eleven were shot while descending or while still in their harnesses after reaching the ground.

The success of this airborne operation can be credited

to a number of factors. The first was the element of surprise. The Japanese, as a result of their experience in 1942, had surmised that the only way the island could be taken would be by amphibious assault. The terrain as it appeared in 1945 was certainly not conducive to parachute landings, especially not on Topside, and the Japanese did not believe anyone would attempt such a maneuver. As a result, the airborne forces were able to trap the large garrison below ground in caves and tunnels or in positions that had been situated to repel an amphibious assault in the ravines leading to Topside and on the tail of the island. Captain Itagaki had even stationed his reserves, as the Americans had in 1942, in the tunnels of Malinta Hill.

Meticulous planning also contributed to the victory. The close working relationship of the men of the troop carrier group and the paratroopers, along with the fact they had trained and previously gone into combat together, were essential ingredients in the success of the operation.

Another reason for success was the use of a command ship that circled the objective; it alerted pilots if they deviated from the approach path and gave instructions for the jumpmasters to increase the count before releasing the troopers. This control measure certainly helped keep the number of jump casualties relatively small.

The human factor must also be mentioned. The officers and men of the 503d Regimental Combat Team (Parachute) exhibited a great deal of spirit and courage. Because they did, their operation stands as an excellent example of the successful use of airborne troops.



MAJOR CHARLES E. HELLER, an Army Reserve ordnance officer, has published several military history articles and is now serving as a research fellow with the Combat Studies Institute at Fort Leavenworth, Kansas. He is an ROTC graduate of Hofstra University and holds a master's degree from the University of Massachusetts. He has served on active duty with the 8th Infantry Division; his Mobilization Designee assignment is to the Center of Military History.

TRAINING NOTES



AIR DEFENSE TRAINING

CAPTAIN ROBERT KILMER, JR.

The United States infantryman in the twentieth century has rarely had to fight a battle in which his side did not enjoy almost complete aerial superiority. There were times in North Africa in late 1942 and early 1943 when his supporting air forces did not control the air — and he paid a price because of it. The same situation existed at times during 1942 in the Pacific Ocean areas as well.

But since the end of World War II, with rare exceptions, whenever he went to war the U.S. infantryman could count on fighting under a protective aerial umbrella. Unfortunately, because he could count on that umbrella, he did not practice how to defend himself against an enemy aerial attack as much as he should have. Today's infantryman doesn't practice it much more.

Using an infantry unit's organic weapons in an air defense role is not

as unrealistic as it may sound. During the Korean War, for instance, the U.S. Air Force lost five times as many aircraft to ground fire as it did to aerial combat. In the fighting in Southeast Asia in the 1960s and 1970s, the U.S. military and naval forces lost more than 400 fixed wing aircraft and 2,000 helicopters to small arms fire alone.

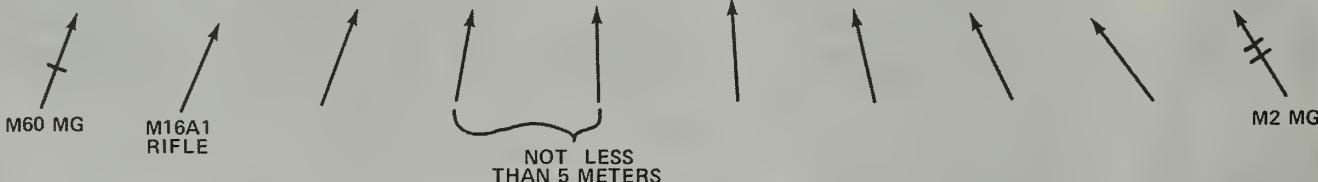
Infantry units using their organic weapons can defend themselves against an air attack, provided their soldiers are properly trained. And this training can be easier than it sounds, if a unit's leaders will only make the necessary effort.

The best training, of course, should consist of both dry fire and live fire exercises against a suitable aerial target. It goes without saying, therefore, that a range is the first prerequisite, followed by ammunition and then a suitable target.

Ranges and ammunition supplies are generally available for this kind of training, but the unit will have to do a certain amount of preliminary planning and coordination before it can actually begin firing.

For example, the unit must forecast its range and ammunition needs well ahead of time, allowing at least eight weeks for its ammunition request to be filled. The ammunition load itself should consist of all tracer rounds so that the soldiers will be able to track their bullets more easily and make any needed adjustments quickly.

The range control office should understand that the unit will be firing at a moving aerial target, and they will also need to know the kinds and calibers of the ammunition the unit will be using. The range itself may have to be surveyed because of the extreme elevations (greater than 35 degrees, usually) at which the unit's



weapons will be fired.

Because an actual aircraft will not be available for the live fire portion of the training program, the unit can count on having a most suitable substitute — the FQM-117A radio-controlled, miniature, aerial target (RCMAT). Most training and audiovisual support centers (TASCs) have RCMATs and may also be able to furnish trained operators. (The July-September 1981 issue of AIR DEFENSE Magazine has an excellent article on the RCMAT.) If they cannot, then the unit will have to train its own operators, and it can expect to have to spend five to seven weeks doing so. This need, like those for a range and for a supply of ammunition, should be forecast by the unit well ahead of time.

The unit should also be developing a good training program. The basic document for this kind of training is the September 1979 version of Training Circular 23-44, Small Arms Against Air Attack. It does more than list training objectives; it also contains a great deal of information that the soldiers should absorb before they start shooting live bullets. One thing they should definitely know is the difference between the football field and the reference point methods of engagement. These methods are clearly spelled out in the circular.

When the unit's soldiers are considered trained and ready, they

should be taken to the range and spread out along the appropriate firing lines. Only the size of the range should limit the number of firers at any one time, although for safety reasons there should always be at least a five-meter distance between each firer. A suggested arrangement of a firing line is shown in the accompanying drawing.

All of the unit's organic small arms should be on the firing line and should be used. The machineguns can be either on the ground or mounted on vehicles. The main point should be to show the soldiers how much fire they can put in the path of an aircraft.

The RCMAT should make a number of passes from each direction — left to right, right to left, and head on. This will give the soldiers a good

opportunity to practice the two methods of engagement.

After an exercise has been completed, the RCMAT should be landed and brought before the soldiers so they can see how many hits they scored. Then a critique should be held so that the unit's leaders can point out what went right and what went wrong, and what the soldiers should do to correct their mistakes.

This training is too important to be addressed lightly, as it has often been in the past. The benefits to the unit from this kind of training far outweigh any efforts that have to be made to make it successful. Before an infantry unit can consider itself ready for combat, it must be able to defend itself against an enemy air attack. With this training, we'll be ready to do just that.



CAPTAIN ROBERT KILMER, JR., a 1972 ROTC graduate of the University of California at Berkeley, is now Deputy Director of the Weapons, Gunnery, and Maintenance Department of the U.S. Army Infantry School at Fort Benning, Georgia. He has served with the 1st and 8th Infantry Divisions and has completed the Infantry Officer Advanced Course.

Flex-HOC

SPECIALIST-4 ERIC P. JORVE

Army Reserve infantry battalions that are severely understrength but faced with growing requirements often find it difficult to cope with their training problems. One such battalion, though, has found a way to

do it — and to double the percentage of its soldiers who pass the skills qualification test (SQT) in the process.

The 3d Battalion, 3d Infantry, a part of the 205th Infantry Brigade (Separate), 88th U.S. Army Reserve

Command at Fort Snelling, Minnesota, developed what it called "Flex-HOC" (flexible hands-on component), a new system of administering the hands-on component of the SQT.

In 1978, about 45 percent of the unit's soldiers either qualified or verified in MOSs 11B (Infantryman) and 11C (Indirect Fire Infantryman). The following year, however, after the new system had been used for the first time, this percentage increased to 93 percent, and the 1980 results were similar.

The Flex-HOC offers commanders greater flexibility in conducting the HOC portion of the test by fitting pieces of the test into their scheduled training and reducing the amount of equipment and the number of personnel needed to administer the test.

The other two parts of the new system involves an individual training exercise (ITX), which integrates the SQT into the unit's ARTEP (Army Training and Evaluation Program) mission, and a skill qualification improvement plan (SQIP), which uses mandatory, self-paced study halls geared toward preparing the individual soldier to take the written component of the SQT.

How did this come about?

In 1978, the 3d Battalion, 3d Infantry, ran the HOC portion of the SQT in a round-robin style on a football field during a regular drill in accordance with the standard method then prescribed by the Army. The unit's leaders were not satisfied with the performance of their soldiers and did not relish the prospect of running the HOC portion again the following year, especially when the number of stations were to be increased from six to twelve and the unit had only slightly more than 30 percent of its authorized strength.

The leaders wondered what would happen if the HOC stations were split up and tested at different times during the unit's annual training period at Fort McCoy, Wisconsin. They reasoned that this would permit the testing of all the soldiers with only one team of scorers. They then decided to move the HOC portion of the SQT into the field and to conduct the testing when the unit was at the peak of its training year. In effect, it meant taking the test to the soldier, not the soldier to the test.

The unit leaders developed the concept of a mobile testing team and put in a request for Active Army NCOs who were already qualified as scorers to help. They reasoned that by using the outside scorers, the unit's own senior NCOs would be freed to train and test with the unit; they also felt it would help dispel any questions of favoritism should the unit perform unusually well under the new system.

ADVANTAGES

The mobile testing team concept had several advantages. First, the team could set up its testing station as close as possible to the spot where the unit would be going through its regular training. This would reduce the time the unit's training had to be interfered with and would do away with the need for additional troop transportation.

The HOC testing, in effect, would also amount to concurrent training and would help fill in some of the gaps that inevitably occur in a unit's training. For example, a soldier or squad that had just completed range firing with the M16 rifle could move to the nearby HOC station to perform the M16 portion of the test instead of waiting for the remainder of the unit to complete its range firing. Or if a check fire should be called by the range OIC, the soldiers could be sent over for testing.

The third advantage of the concept was that, if the unit's training plans should change abruptly, the mobile team would be flexible enough to change along with the unit. (When this situation did occur later, testing plans were adjusted accordingly and without difficulty.)

The leaders soon found that they would have to depend heavily on the squads and squad leaders to make the system work. Since the squad leaders would be moving with their soldiers to and from the testing area while training was in progress, they were made responsible for seeing that all of the soldiers in their squads were properly prepared and tested.

They were expected to keep track of the weak points in each individual soldier's skills and to provide the necessary refresher training when they could. They would report the progress of their squads to their platoon leaders. In this way the squad leaders themselves would be tested on how well they could control the minute-to-minute tactical and administrative operations of their squads.

In preparing for the HOC portion of the test, the unit leaders began to see that the SQT had to be emphasized more during the unit's day-to-day training activities. They also felt that some type of brief, daily emphasis should be placed on the written component of the test — traditionally the stickiest part of the exercise. With these considerations in mind, they devised the ITX and the SQIP.

THE ITX

The ITX was nothing more than an individual soldier's tasks practiced in logical groupings that combined individual and collective training. For example, there were certain tasks within each of the six phases that the soldiers had to perform. Emphasis was placed on making sure that each task was done correctly; if the mission was accomplished at the same time, so much the better.

Each soldier going through the training program practiced the HOC stations without regard to time constraints. Any soldier who made a mistake was corrected on the spot by his squad leader. If a soldier needed additional training, it was done at the squad leader's or the unit's discretion. Squad leaders kept notes on their soldiers' progress and communicated that progress up the chain of command.

The six phases of the ITX were:

- **Preparation phase.** Squad order, camouflage, rifle maintenance, operation of the squad radio, and transmission and receipt of messages.

- **Movement phase.** Movement as a fire team member; moving around obstacles.

- **First aid phase.** The four life-saving techniques, call for MEDEVAC, and transmission and receipt of messages.

- **Land navigation phase.** Movement as a fire team member, determination of magnetic azimuth, and measuring distance on a map.

- **Contact phase.** Movement as a fire team member, movement under direct fire in buddy teams, and reorganization after contact.

- **Adjust artillery phase.** Movement as a fire team member, estimation of range, transmission and receipt of messages, and call for fire.

Different phases of the ITX were also used when a squad moved to a HOC station for testing. For example, in one case the battalion moved out into the field in a defensive posture; the ARTEP mission of the unit at this point was the "squad in defense."

As each squad prepared its own defensive position, members of a squad or the entire squad went back to an area behind their lines to perform the HOC station using the movement phase of the ITX. Thus the squads left the area tactically,

while the other squads in the area covered for the missing squad as required by the ARTEP mission. In this respect, there was little loss of training time.

THE SQIP

The SQIP was aimed directly at improving the individual soldier's performance on the written component of the SQT. It involved a series of study halls geared toward refreshing a soldier's military knowledge, not starting him off from scratch. The study halls were designed to make each soldier aware of his own strengths and weaknesses with respect to the written component of the SQT.

Multiple-choice questions were extracted from the Soldier's Manual on the basis of questions that could be asked of soldiers at Skill Levels 2, 3, and 4. Senior NCOs at Skill Level 5 were expected to study at their level on their own.

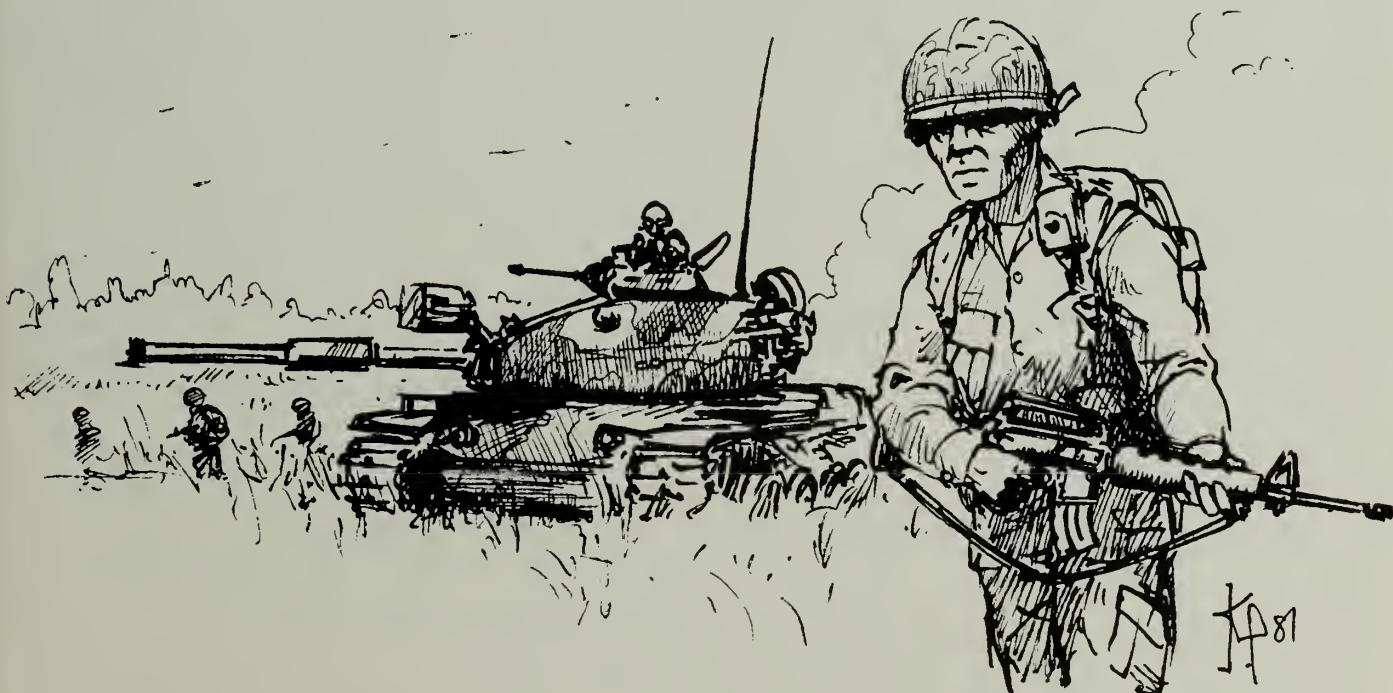
Pre-tests were made up on each subject area, such as NBC or the M16 rifle. The soldiers at Skill Level 2 were expected to answer six questions

correctly while the Skill Level 3 personnel were expected to answer eight correctly. The questions that were drawn up turned out to be surprisingly close to the actual questions on the SQT.

The pre-tests were broken down into six study periods, which ultimately were scheduled for Days 1, 2, 3, 4, 5, 9, and 12 of the annual training cycle. The study halls, held in a barracks rearranged for the purpose, began after the evening meal and ran about an hour and a half.

The study halls were self-paced. Each soldier first took the pre-test at one of the various stations dealing with one portion of the SQT notice. If the soldier passed the pre-test, he was given a "go" and advanced to the next station. If a soldier passed all of the pre-tests, he was finished.

If he failed to pass a pre-test at any of the stations, however, he was directed to do additional study on the particular subject. Immediately behind the station was a variety of resource materials — the Soldier's Manual was opened to the appropriate page, a Besseler Cue-See projector with the appropriate tapes was ready





to use, and other resource materials were there for the soldier to work with.

In addition, someone who was knowledgeable about the subject was present at that station to answer questions and provide personal instruction. This person was either a platoon sergeant, platoon leader, or Active Army NCO.

If the soldier could not pass a post-study test, his squad leader was notified so that he could conduct remedial training.

After the plans for the HOC portion of the test, the ITX, and the SQIP had been developed, the equipment and personnel needed to conduct the test were assembled. The necessary field tables, training aids, and other supplies were drawn from the battalion's S4 section. The Training Aids Support Center at Fort McCoy was the main point of issue for such training devices as Claymore mines, M72 LAWs, hand grenades, and moulage wounds. Medical supplies were obtained from the battalion medical section.

Other units were tasked to provide some of the sensitive items for HOC

testing, such as M60 machineguns, M16 rifles, and M203 grenade launchers. Mortar units provided .45 caliber pistols, compasses, and M16 plotting boards.

Test booklets and mark-sense forms were filled out at the home station by the soldiers themselves. On the first day of the annual training period, the soldiers checked their forms for accuracy. Then the forms were filed by unit and MOS and put on board the mobile testing team's van. When the soldiers arrived for testing, the scoring booklets were removed from the filing cabinet and issued to the soldiers. The individual soldiers were then briefed and tested, and the scoring team marked the booklets and refiled them.

When the testing was completed each day, the results were recorded and provided to the unit commanders. To save time, the mark-sense forms for the written test were included in each soldier's booklet. The forms for the HOC portion of the test were also maintained by unit and MOS; once completed, they were placed in the individual's scoring booklet for a quality control check at

his home station.

The battalion S1 and S3 sections assisted in completing the mark-sense forms, and the S1 section also provided the testing team with an accurate personnel roster and the status of each individual soldier. The S3 section helped with integrating the HOC stations into the training schedule, requisitioning training devices, forecasting ammunition needs, and coordinating various aspects of the operation. It was left to the test site manager to determine the exact times for testing and the sequence of units to be tested.

The battalion's leaders believed that this plan helped make their unit's testing and training more realistic and challenging. Their soldiers were more enthusiastic about studying for the SQT and often did more than they were required to do. The Active Army scorers who helped with the system also felt it was effective.

In 1980 two other Army Reserve infantry battalions adopted the flex-HOC system and had equally impressive results. In all three battalions, the ratio of soldiers who qualified (scoring 80 percent or better on the SQT) as compared to those who verified their MOSs (scoring 60 to 70 percent) was significantly higher.

Flex-HOC has caught the eye of Army trainers everywhere. Additional information on the program can be obtained from the 88th U.S. Army Reserve Command, Building 57, Fort Snelling, Saint Paul, Minnesota 55111.

SPECIALIST 4 ERIC P. JORVE is an information specialist with the 88th U.S. Army Reserve Command at Fort Snelling, Minnesota. He served on active duty as a photojournalist with the **SETAF Outlook** in Vicenza, Italy, among other Army publications, and has worked for several civilian publications since his release from active duty in 1977.

Map Reading Basics

**MAJOR STANLEY H. HOLGATE
STAFF SERGEANT THOMAS A. SCRAPANSKY**

It's high noon. Do you know where your troops are? More to the point, do they know where they are? The evidence suggests that many soldiers are deficient in the basic map reading skills.

These deficiencies were confirmed by the results of a mini-test the Army conducted several years ago. In it the use of natural map references was compared with the use of combinations of manmade and natural references.

The results of the test did not conclusively support the notion that soldiers who use manmade references have less trouble than those who use only natural references. It did, however, provide some insights into the basics of map reading that should prove useful to company commanders, platoon leaders, and their NCOs in their map reading training and exercises.

The first thing any trainer needs to do is to get to know the soldiers he plans to teach. He can learn their weak points and their strong points through diagnostic tests; then he should select those instructional techniques that use the strong points to improve on the weak ones.

The tests may show that some of the soldiers are fairly proficient in map reading and need little or no more training. They can be used to tutor those who do need it. This technique improves the performance and motivation of the better soldiers and also frees the trainer to devote more time to monitoring the progress of all the soldiers.

In developing a training schedule,

trainers should spread their map reading classes across at least a week with an hour each morning devoted to classroom instruction and the afternoon period to field exercises. At the end of each morning session a diagnostic test should be used to evaluate any deficiencies. This information can then be used in the afternoon class to correct bad habits quickly before they become set.

Because map reading has its own language, the students must first be taught its vocabulary. They also have to learn to relate the symbols on the map to objects on the ground and to variations in the earth's surface. Training materials that combine seeing, hearing, and feeling should be used to help those soldiers who fail to learn from standard classroom teaching methods. Much of this specialized training will probably have to be done on a one-to-one basis and the trainer will have to modify his methods of instruction to meet the special needs and the motivation level of each soldier. Some will need to be led by the hand through every step.

After the soldiers reach an acceptable level of performance, frequent and recurrent training exercises should be used to maintain that level. Map reading is a skill that seems to be lost quickly if it is not continually practiced.

Two basic rules must be drilled into the soldiers during their map reading training: Be precise, and check results.

The instructor should also spend time describing the most common errors so each soldier can work to avoid

them. Some of these are:

- Errors in compass readings.
- Poor terrain association.
- Incorrect positioning of the protractor.
- Rushing to completion without checking the work carefully.
- Using reference points that are too far away.
- Marking the wrong reference on the map.
- Arithmetic errors.
- Reading coordinates wrong.

The following general rules will help a soldier prevent such mistakes:

- When orienting the map, he should place a pencil on it with one end on his approximate location and the other end pointing to or lying on a prominent terrain feature.
- He should select references that are far enough apart to form a well-defined intersection but close enough to him so that he can make an accurate estimate of range.
- After determining his location, he should use terrain association to check it more carefully.
- After determining the azimuth to a target, he should walk the observer-to-target line, analyzing the terrain in the process.

After the basic map reading skills have been taught in the classroom, they should be employed in the field at every opportunity. Map reading should be incorporated into as many unit activities as possible, so long as the exercises are meaningful and bear a natural relationship to the other training that is going on.

During some of these exercises, a simulated loss of leaders should be

used to force the younger, less experienced soldiers of the unit to take command and use their map reading skills in performing selected tasks such as these:

- Members of the unit can be called on to make a terrain analysis (using a map) of the route over which the unit is supposed to travel during a movement to contact.
- The soldiers can evaluate the terrain in terms of observation and fields of fire when bounding overwatch maneuvers are planned.
- Members of the unit can determine possible locations for fire support teams (FIST) if artillery fires are to be used to suppress the enemy.
- The soldiers can analyze the terrain from the map for purposes of selecting likely launch points for anti-armor missiles. (A good launch point must have a clear field of fire without dead spots where potential targets can hide.)

During some of the unit's other training periods and exercises, some

soldiers can be selected to determine the unit's location by grid coordinates while others are used to evaluate their performance. The soldiers can perform these tasks while waiting for transportation or during rest periods.

Such hip-pocket training methods tend to keep the soldiers on their toes with regard to their map reading skills and their knowledge of terrain analysis. By practicing their basic skills in a number of different situations, they should eventually reach the level of permanent learning.

To achieve this goal, each commander and trainer needs to stick to the basics of map reading — he should use the soldiers' strong points to correct their weak ones; promote frequent practice; emphasize the importance of accuracy rather than speed; and incorporate map reading into other training as well. This method may not guarantee that he will always know where his troops are, but it *will* help them to know where they are.

MAJOR STANLEY H. HOLGATE, a Medical Service Corps officer, was commissioned through the ROTC program at Texas Tech University in 1966. He holds a PhD degree in psychology from Texas Tech and has written numerous technical papers and reports. He is presently assigned as the Chief of the Human Factors Branch at the U.S. Army Combat Developments Experimentation Command (CDEC) at Fort Ord, California.

STAFF SERGEANT THOMAS A. SCRAPANSKY, now assigned as a Drug, Alcohol, and Mental Hygiene Counselor in Korea, formerly served as a research assistant at USACDEC. He is a 1973 graduate of St. Edward's University in Austin, Texas, and holds a master's degree from Boston University.

THE FIVE-DEGREE METHOD

LIEUTENANT MITCHELL E. TORYANSKI

AUTHOR'S NOTE: I wish to acknowledge the assistance of Sergeant First Class Stephen Gamble in developing the subject of this article.

As the effective ranges of our weapons have increased, so have our soldiers' difficulties in trying to estimate those ranges. A soldier may be able to guess with a fair degree of accuracy where the end of two, three, or even four football fields would be, if he uses this method of judging distance. But even a soldier who is a former gridiron champ cannot judge

where the end of 30 football fields set end to end would lie.

Using the size-of-objects method of judging distance, who can tell with

any degree of accuracy whether a Soviet T-62 tank is either 800 or 1,100 meters away? A soldier would need a calibrated, telescopic eye to discern

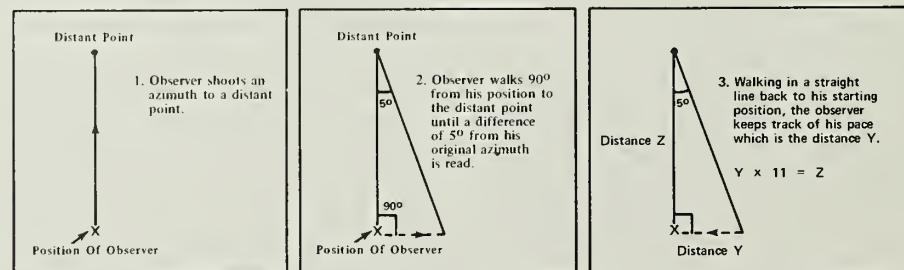


FIGURE 1

distance paced
(units)

distance to point
(units)

20	30	40	50	60	70	80	90	100
230	343	457	572	686	800	914	1030	1143

FIGURE 2

the difference and even today's modern soldier does not come equipped with one. Yet unless he can determine that distance with some degree of accuracy, he might well forfeit surprise and prematurely give away his position.

Certainly maps of areas with recognizable terrain features can help a combat leader judge distance when he sets up his key weapons. The laser rangefinder is also a quick and accurate aid in determining range, but just like any other piece of equipment, it has to be in the hands of the soldier to be of any use. It is doubtful that every soldier will have one of these in the future.

What the Infantry and Armor soldier and the Field Artillery forward observer really need, then, is an accurate method of determining distance on the battlefield with no more than their basic combat equipment. With a compass and a short pace count, a soldier has such a method, and it is much faster than pacing the range to a distant point and far more accurate. It is called the Five-Degree Method.

METHOD

As shown in Figure 1, the observer chooses a target point and with a lensatic compass shoots an azimuth to

that point. Adding 90 degrees to this reading, he then walks at a right angle to the line between his chosen point and the target point, periodically stopping to take an azimuth reading to that same point. When the compass shows a difference of five degrees from his initial azimuth he stops. He then walks back in a straight line to his starting point, keeping count of his pace. Once back at the starting point, he converts the number of paces he took on his return trip to whatever unit he wants to use with his individual pace count. He then multiplies this distance by 11, which will give him the approximate range to his target point. (The factor of 11 was obtained by simple geometry, using the known angle of 5 degrees and the distance Y. The exact figure is 11.43.)

If taking a pace count to the right is impractical or impossible, the soldier can walk to his left instead, following the same procedure, but subtracting 90 degrees from his initial azimuth in-

stead of adding it.

A graphic aid such as the slide viewer pictured in Figure 2 can assist the soldier in converting his pace distance (Y) to down-range distance (Z). The viewer shown uses the factor of 11.43 for the greatest accuracy.

The Five-Degree Method will not always be the best one for determining range, just as the other methods cannot be used in every case. Whenever possible, though, this method should be used because of its simplicity and its accuracy. It is especially useful in sparsely wooded areas and in the barren type of terrain found in a good part of the Middle East.

By instructing his troops in this method, a leader can provide them with a simple way of determining range that is also reasonably fast and highly accurate. With this additional skill, the soldiers will be better able to accomplish their missions and increase the effectiveness of their unit.



LIEUTENANT MITCHELL E. TORYANSKI, a 1980 graduate of the U.S. Military Academy, has completed the Infantry Officer Basic Course and is now assigned as a platoon leader in the 3d Battalion, 60th Infantry, at Fort Lewis, Washington.

Battalion Officer School

CAPTAIN WALTER A. SCHREPEL

The Army needs to find ways to promote the professional development of its junior officers, and a battalion officer school could be one of the most important ways. Such a school, if organized properly, would bridge the gap between the formal instruction offered by the service schools and the training provided by the unit itself. It could also be the key to developing and maintaining a high degree of professionalism in the battalion's officers.

A battalion school would give the commander a chance to present specific subjects in detail to refine the knowledge and skill of his junior officers. He could also use it to accelerate their professional development process as well as to raise the quality of all of the officers in the battalion.

To achieve these objectives, the school's program should have both immediate and long range goals. First, it should concentrate on helping to improve an officer's technical proficiency so that he can be more effective within his unit, in garrison or in the field. As a long range goal, each officer should be groomed to assume positions of greater responsibility on short notice.

The battalion school should include three main subject areas — professional reading, oral and written communications, and meeting performance standards.

Each officer in the Army should be well-read in his profession and should be able to express himself both in writing and in his oral communications, especially when giving instructions to his subordinates. And he should be fully capable of meeting the

performance standards for his grade and mission.

READING

In the first phase of the program, the battalion's S3 could develop a comprehensive reading list for all of the battalion's officers. As a starting point, the U.S. Army Infantry School's recommended reading list of titles could be used. Reading in the history of the profession of arms is always useful in understanding the past as a foundation for the present and the future. And through such reading young officers can also gain an understanding of the dynamics of battlefield leadership, of the tactics used in a given piece of terrain, or of the key links in the development of a unit's esprit and heritage.

At the same time, the relevant regulations, training techniques, and command information items, which can be provided by the Command Sergeant Major, would certainly help the new officer become better acquainted with garrison procedures.

An officer might be required to select up to three titles from the recommended list of publications — perhaps a historical work, a chapter from a how-to-fight manual, and a regulation. He should be given a specified time limit, such as 30 days, in which to complete reading them.

WRITTEN AND ORAL EXPRESSION

In the writing phase of the course, the officer should be required to

prepare a brief on each of his readings, similar to a book report. It would be presented to the officer's rater, who would be responsible for checking its quality and adherence to the program before forwarding the brief to the battalion commander.

In addition, the battalion commander might designate certain subject areas to be presented orally. At an informal officer's call, the designated officer would brief his contemporaries on his assigned subject. In this way, the briefing officer would learn the dynamics of a military briefing and develop confidence and poise in the process. He would also learn the value of being well prepared.

As a side benefit, the battalion commander would be able to develop a group of subject matter experts who could then disseminate their knowledge throughout the battalion. The result should be a gradual improvement in the quality of training that would benefit the entire battalion.

PERFORMANCE TESTING

In the final phase of the program, all the officers involved in it should be tested on the depth of their professional knowledge. This knowledge should include both tactics and administration; the well-rounded officer should excel in both.

The tactics test might be organized according to the individual officer's duty position. A rifle platoon leader, for example, might be tested on platoon procedures in a defensive scheme of maneuver, and also on

what he would do if he were selected "on-the-spot" to be a company executive officer or a weapons platoon leader. He might be required to run a reaction course or to run a certain distance in a specified time.

A similar process could be used to test his knowledge of garrison and administrative procedures. He might be required to check on troop financial or promotion policies, to prepare elimination procedures, to perform as a survey officer, to supervise a supply room, or to inspect weapons, NBC equipment, and vehicles.

A battalion officer school organized in this fashion could be used to improve and sustain the quality of the battalion's officers and its effects should eventually be transmitted to

the battalion's NCOs as well. At the very least, the qualitative rating of the junior officers could be assured by comparing the individual against specific measurable goals. What is

more important, the school could provide the basis for a universal framework for developing leaders of high quality for an effective volunteer Army.



CAPTAIN WALTER A. SCHREPEL is a 1976 graduate of the U.S. Military Academy. He has completed the Infantry Officer Advanced Course and is now an instructor in light infantry tactics in the Command, Tactics, and Doctrine Department of the U.S. Army Infantry School at Fort Benning, Georgia.

Platoon Inventory

MAJOR CURTIS R. ROGERS

After meeting his commander and receiving a briefing on the unit, a newly assigned lieutenant faces his first real challenge — conducting a 100 percent inventory of his platoon's equipment. His signature on that inventory will mark the final step in his full assumption of responsibility for his platoon, and he should take care to do it right.

His first step in the inventory process should be to get together with the experts — the battalion S4 or the property book officer, the company executive officer, and the company supply sergeant. Thirty minutes with an expert can unravel what at first may look like an insurmountable problem. During the discussion, he should ask them about any recent change or problem that could affect the inventory.

At the same time, he should obtain from them the current technical manuals, supply bulletins, supply catalogs, and any other publications he will need to conduct the inventory. In addition, he must make certain that the appropriate TM for each piece of equipment, along with its publication date, appears on the master hand receipt.

These publications are essential; without them an inventory is a waste of time, because they describe the equipment through photographs and equipment listings. The major components of the equipment must be reviewed with reference to both the descriptive pictures and the BII (basic issue items) list.

This advice cannot be stressed too strongly. Failure to use the current publications in the inventory process

is probably the most common mistake a new platoon leader makes, and the most costly. He should therefore follow the rule: "If you ain't got the book, don't look."

Once he is satisfied that he is sufficiently educated and equipped, the lieutenant can begin the formal inventory process.

A change of command inventory is a joint mission. It should be done with both the outgoing and the incoming officers present; it should not be conducted if one or the other is absent. A sufficient amount of time should be set aside for the inventory, and the entire process should be well organized. Unrelated tasks must be set aside until the inventory has been finished.

All items that are to be inventoried — that must be counted — should be

put out in the open where both parties can see them. The front of the company's area is probably as good a place as any. All of the platoon's equipment must be made available; otherwise, those taking the inventory will spend a lot of time trying to chase down the missing items.

When physically counting equipment, both platoon leaders must be certain of the actual accountable quantity. For example, a unit may have been issued or may have turned in items since its last master hand receipt was made. (If the unit is using the division logistics systems (DLOGS), a computerized list will be provided.) Normally, the master hand receipt is updated before the inventory, and this should eliminate any need to review "sub-hand receipts." But a platoon may have equipment signed out to its members; if so, it must be turned in before — not during — the inventory and then re-issued. This simple formula can be used to insure a correct balance sheet: Hand receipt count, plus issues and minus turn-ins, minus equipment in maintenance, equals the accountable quantity.

One critical aspect of accounting for the equipment that is in maintenance is to make sure the complete item is turned in. Although this is normally required, sometimes components are turned in but not some of the other end items.

The identification of equipment may be difficult, too, but the new platoon leader must stick with it. He may even have to measure, weigh, and compare certain items carefully. Above all, he must be certain of the presence and composition of every item of his equipment.

During the inventory, equipment should also be checked for its serviceability. If it is badly worn and a replacement can be ordered, it should be done at that time. Any missing

CHECKLIST FOR PLATOON INVENTORY

- Check with the experts.
- Without the book, don't look.
- Inventory together or not at all.
- See it all; touch, measure, be certain.
- Organize, and follow the schedule.
- Inspect and order as you go.
- Excess items belong to Uncle Sam.
- If it has no purpose, turn it in.
- Problems? Go back to the experts.
- Correct administrative errors now.

items should be reported immediately to the commander and to the S4 or property book officer, and supply actions should be started to remedy the shortages. This equipment should not appear on the hand receipt.

At the same time, any excess equipment must be turned in to the supply people; this is as much a moral problem as it is a physical and monetary one. It may be found, also, that certain items no longer serve a purpose within a unit, and with the commander's approval, they should be turned in as well.

If any problem arises during the inventory that seems impossible to resolve, the platoon leader should go back to the experts and insist on a detailed explanation. Often the prob-

lem will turn out to be simple administrative errors on hand receipts — even experts can make mistakes!

Finally, the new platoon leader should be sure that the master hand receipt he signs reflects things as they really are. To discover otherwise later can be professionally and financially devastating.

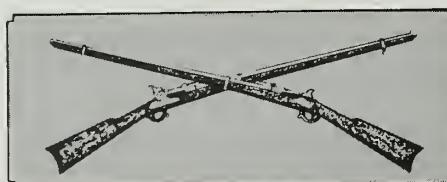
After the new platoon leader has signed for his platoon's equipment, he should make it a point to continue to inventory and inspect that equipment throughout his tenure in that unit. In fact, the semi-annual inventory is as important as the initial one. He must pay special attention to any items that might be added to the BII after his initial inventory and see that they are put on the hand receipt.

At the end of his tour, he must conduct a final 100 percent inventory with his successor.

Supply discipline and equipment accountability are high priorities for today's unit leader. A 100 percent inventory may not be as exciting as a combat patrol or a platoon raid, but it is at least as important. And any platoon leader — either a new one or an old one — owes it to himself to do it right.



MAJOR CURTIS R. ROGERS
was commissioned through the Officer Candidate School in 1969 and served as a rifle company commander and a battalion S4 with the 193d Infantry Brigade in Panama. He is a 1977 graduate of the University of Tampa and recently completed the Foreign Area Officer Course. He is now assigned to the Rapid Deployment Joint Task Force at McDill Air Force Base, Florida.



ENLISTED CAREER NOTES



BRANCH CHIEF COMMENTS

The Army is overstrength in many combat support and combat service support MOSs while the combat arms are critically short at the ranks of SGT/SP5 through MSG/1SG. To implement a force alignment plan, DA is soliciting volunteers from MOSs that are overstrength.

MILPERCEN is advertising MOSs in which vacancies exist, canvassing overstrength career fields, and pointing out the advantages of reclassifying into the combat arms for those NCOs who qualify. Among the proposed advantages are MOS training and increased promotion opportunity. The chain of command at all levels will play a decisive role in force alignment through the manner in which they present it to the troops under their command. Commanders must lay a foundation of support for force alignment if NCOs in overstrength MOSs are to make the best decision for the Army and themselves.

LTC TOMMY F. GRIER JR.

PDI CODES

MILPERCEN has introduced a new, temporary management tool called the Project Development Identification (PDI) code. A two-character, alphanumeric designator, the code is used to identify personnel who have gained a high degree of knowledge and experience in a specific project, system, concept, or item of equipment, and for whom no other appropriate occupational identification has been implemented.

The PDI code is not a substitute for an MOS; it is designed to identify qualified personnel at a critical period — during the establishment of a

training base in the development and early deployment of new military technology.

The code will fill a real gap in the personnel management system. For example, a soldier who has trained with a system such as the Abrams tank or the Bradley IFV/CFV during its development and testing has valuable experience. But that experience may not be enough to warrant his reclassification into a new MOS even if an appropriate one exists, and in many cases there is none. Without some way of identifying skills acquired outside the formal MOS structure, these valuable personnel might never be assigned to the units that are scheduled to get that particular vehicle.

Requests for the award of a PDI code to individual soldiers are initiated by DARCOM (the project manager), TRADOC (either the system manager or the commandant of the proponent school), or the commander of the unit responsible for field testing the weapon or equipment.

MILPERCEN (DAPC-POC) reviews the requests and assures that the proper code is entered on the soldier's record in the Enlisted Master File. At the same time, MILPERCEN (DAPC-EPS-D) receives deployment schedules for the new equipment or system and determines which TOE units will need PDI-coded personnel, how many, and when. This information is then passed on to the appropriate MILPERCEN career branch (in this case, DAPC-EPK-I), which identifies qualified soldiers from the Master File, assigns them against the PDI requirement, and notifies the gaining unit (or equipment training team).

Once the MOS structure has been adjusted to accommodate the new

system or equipment — for example, with the introduction of MOS 19K for the Abrams tank — PDI-coded personnel may be reclassified accordingly and the PDI deleted entirely from the Enlisted Master File.

A new Army regulation governing PDI codes and their associated sub-codes has been drafted and should be available soon. In the meantime, everyone involved should be aware of the following points:

- MILPERCEN is committed to making the PDI system work, especially in regard to the Abrams tank and the Bradley IFV. Infantry/Armor Branch will continue to devote special attention to managing the PDIs associated with these systems.

- It is important that only the personnel actually involved in the operation, maintenance, or application of the equipment be nominated for the PDI code. (This would normally exclude cooks, clerks, and other support personnel in field test units.)

- It is even more important to see that soldiers who do have the experience are nominated for the PDI. This requires the cooperation of the activities and individuals indicated in assuring that complete rosters of nominated personnel are submitted to MILPERCEN in a timely manner. Certificates of training or some other indication of the PDI award should also be posted to the soldier's field 201 file.

- The individual soldier needs to know what a PDI code is, how it is awarded, and what it means to his career. At the same time, he should know that the PDI will not unfairly jeopardize his CONUS stabilization and will not make him ineligible for deletion or deferment from overseas assignment.

- A PDI code should be awarded

to soldiers who hold an appropriate DS/GS maintenance MOS (CMF 63) as well as combat arms MOSSs (CMFs 11 and 19). It is important that experienced maintenance personnel be identified early.

The commanders of the units or activities that get PDI-coded personnel are encouraged to report on the actual performance level of soldiers so identified. Their comments should be forwarded directly to the appropriate career branches.

Again, the PDI code is a temporary management tool. As new systems and equipment come on line, the skills reflected in the PDI code will be integrated into the formal MOS structure. Existing PDIs will be rescinded and new ones established as needed.

PATHFINDER VACANCIES

There is a critical need for 11B1P and 11B2P soldiers to fill Pathfinder requirements at Fort Campbell, Kentucky, and at Fort Rucker, Alabama.

Qualified applicants, within 10 months of return from overseas, may submit DA Form 4187 for temporary duty en route to Pathfinder School in accordance with DA Pamphlet 351-4, through command channels, to MILPERCEN, ATTN: DAPC-EPK-I, 2461 Eisenhower Avenue, Alexandria, VA 22331.

PERSONNEL MANAGEMENT

To ensure that there is a balanced force consistent with the manpower ceilings established by the Congress, Army planners project enlisted personnel strength figures into the future. By projecting the number of soldiers scheduled to leave the Army after their commitment and those who will retire, the planners determine the number of soldiers who must enter the Army each year in order to maintain the desired overall strength. The recruiting objective in the Active Army is translated into annual training requirements by mili-

tary occupational specialty (MOS).

The annual accession and training requirements for an MOS are published in the Army Program for Individual Training by ODCSOPS. Training spaces, or "quotas" as they are commonly called, are entered by MOS, option, and Advanced Individual Training (AIT) start date into the Recruit Quota System (REQUEST).

Within the life cycle management of enlisted personnel, the career divisions of the Enlisted Personnel Management Directorate are responsible for managing an average of 20 to 23 years of a soldier's career.

Although the career branches vary in structure, each branch is composed of a professional development (PD) section and an assignment section. The PD section is responsible for monitoring the professional development of its career soldiers, while the assignment section is responsible for assignment and reassignment functions and related actions.

Professional development can be defined as the developmental and educational function involving ascending levels of military education, civil, or technical training coupled with a predetermined pattern of assignments and duties within a given MOS which prepares the individual soldier through experience for service at the highest enlisted grade.

The PD sections, instituted in 1975 with the inception of EPMS, are staffed by a team composed of civilians, military personnel management specialists, and branch oriented NCOs who have a broad background in the applicable career fields. Within the Infantry/Armor Career Branch, Combat Arms Career Division, for example, the Infantry PD team consists of an Infantry master sergeant (MOS 11B5) and four sergeants first class, Infantry Career Advisors (MOS 11B/C). Among the tasks of the career advisors is a detailed and continuing review of the Career Management Information Files (CMIF) of each 11B/C NCO at each NCO grade level (from the rank of SSG). Their duties are to:

- Recommend career development assignments and schooling.
- Monitor soldiers' assignments and utilization.
- Recommend reclassification or retraining actions.
- Send personalized counseling letters to soldiers who are showing a downward trend and who need to improve in certain areas or who may possibly face Qualitative Management Program (QMP) action.
- Conduct both personal and telephonic interviews with the soldier on a wide range of subjects.
- Answer personal inquiries ranging from assignment actions to EPMS changes and exception to policy requests.
- Select nominated NCOs for special assignments such as ROTC, drill sergeant, or recruiting duty.
- Select soldiers for the DA-directed Reclassification Program.
- Participate as voting members of the EER/SEER Appeals Board and the QMP Appeals Board.
- Evaluate requests for branch clearance, stabilization, overseas assignment, or voluntary reclassification.
- Review DA selection board results, such as for USASMA, ANCOCES, or promotion, and QMP lists for the purpose of preparing congratulatory letters, TDY and PCS instructions, and making annotations in the soldier's CMIF.
- The management of all sergeants major is centralized within the Command Sergeants Major/Sergeants Major Office of EPMD. This office works directly under the Office of the Director of Enlisted Personnel.
- A decision was made in 1975 to consolidate all SGM career management in this office and to implement centralized assignment procedures. The objective was to ensure the efficient and intensified management of SGMs by providing utilization within the individual's area of expertise. The management procedures take full advantage of personal interests, aptitudes, and experience and provide for a pattern of assignments in a variety of duty positions in the

soldier's career management field.

The management of CSMs and SGMs is based on the concept of progressive assignments through positions of increasing responsibility on the basis of background, demonstrated performance, and availability for assignment.

The assignment of CSM to the staff of a commander in the rank of Major General or higher requires the nominative process. CSMs who have the desired qualifications for such a position are evaluated and considered for nomination. Normally, three individuals will be nominated and the comments of the first general officer in each soldier's chain of command will be solicited. If they are recommended, they are included in the slate of nominees submitted to the commander. The individual selected by the general officer is placed on orders to that assignment.

ROTC SCHOLARSHIPS

The Army has reserved 100 ROTC scholarships for active duty enlisted soldiers. These scholarships cover tuition, textbooks, laboratory fees, and certain other educational expenses. For example, if a calculator or a slide rule is required in a certain major academic field, the Army will buy one or the other of them.

The Army will also pay scholarship winners \$100 a month, up to \$1,000 for each academic year, in tax-free subsistence allowance. Cadets are also paid for the six-week Advanced Camp, which they must attend during the summer between their junior and senior years.

In addition, scholarship winners can use any G.I. Bill or Veterans' Educational Assistance Program (VEAP) benefits they may have earn-

ed while on active duty. The nearest Veterans' Administrative Regional Officer can determine their eligibility.

Last year the Army expanded the active duty scholarship program to give more soldiers a chance to apply and also extended the age limit by giving soldiers credit for active service. There is now a three-year scholarship along with the two-year award, and under the new rule soldiers must be younger than 29 on June 30 of the commissioning year. Previously, they had to be younger than 25.

This means that soldiers can now count up to four years of active duty: three years of active duty extends the age limit to under 28; two years extends it to under 27, and so on. This gives soldiers more time to earn credits so they can apply for the scholarships.

To apply for an ROTC Active Duty Scholarship, a soldier must:

- Be a U.S. citizen.
- Be at least 17 years old before the scholarship becomes effective.
- Have served at least one year on active duty.
- Have been accepted for enrollment by a college or university that offers ROTC, or be able to make arrangements to attend ROTC classes at a nearby school that does.
- Have a score of at least 115 on the General Technical (GT) Aptitude Test.
- Have a satisfactory National Agency Check.
- Have maintained a "C" average in college work.
- Have two years of college credit for a two-year scholarship, or one year of college credit for a three-year scholarship.
- Be recommended for the scholarship by his commander.

These soldiers will be discharged from active duty to enter college. Once their scholarships are in effect,

they will be Army ROTC cadets.

The scholarship cadets can major in any area that leads to a bachelor's degree except theology. They can take part in any extracurricular activity that does not interfere with their military science requirements. They will receive commissions as Regular Army or Army Reserve second lieutenants after completing all requirements and graduating, and they must then serve on active duty for four years.

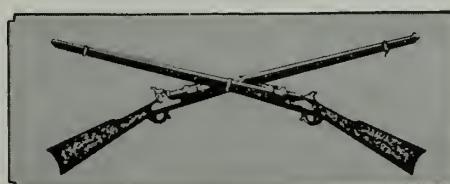
For applications or more information, anyone who is interested should write to Army ROTC, HQ TRADOC, ATTN: ATRO-CS, Fort Monroe, VA 23651.

Soldiers must request scholarship applications for the 1982-83 school year between 15 January and 15 April 1982. If a request is not received by 15 April, it cannot be processed for this year's cycle. Completed applications must be postmarked no later than 1 May 1982.

ENLISTED CIVIL SCHOOLING

The Fellowships, Scholarships, or Grants Program authorizes qualified soldiers to apply for and accept fellowships, scholarships, or grants offered by corporations, foundations, funds, or educational institutions organized primarily for scientific, literary, or educational purposes. Application procedures for this program are explained in AR 621-7.

The Enlisted Education Program, which authorized qualified soldiers to study for up to two calendar years to satisfy Army skill requirements that could not be acquired from the Army's school system, was terminated in 1976. There is no degree completion program for enlisted personnel at this time.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

We recently returned from several trips during which we interviewed more than 1,500 Infantry officers. We visited USAREUR and traveled throughout V Corps, VII Corps, and the 21st Support Command; we visited Fort Leavenworth and the CGSC Class of 1982, Carlisle Barracks and the AWC Class of 1982, and the Home of the Infantry, Fort Benning, where we briefed and interviewed the IOAC and IOBC classes in session.

We sincerely appreciate the cooperation you gave us and your understanding of our tasks and our joint mission of providing the Army field commanders with both the quantity and quality of Infantry officers they need.

Most of you are concerned with the accuracy of your Officer Record Briefs. I can only say that we need to be patient and persistent in this matter, although the ORBs are getting better. Each time you review an ORB you should get with your serving MILPO and annotate any changes. I realize that many of you may do this several times without positive results, but don't let up. Your ORB and P-fiche are especially important in that they are the two documents that appear before promotion and selection boards.

We at Infantry Branch, along with the Infantry Center, have prepared a letter to be sent to each Infantry officer. In essence, that letter will tell you what we expect to happen in 1982 as far as assignments are concerned. In it, each assignment officer presents a summary of his area of responsibility. We hope that it will be helpful to each of you in understanding our tasks.

A review of the Command and

Staff selection process appears in a note that follows. I recommend strongly that those of you who have not been selected to attend one of the resident colleges enroll in one of the nonresident courses. The successful completion of these courses will certainly improve your qualifications for assignment to key positions in the future. Two specific courses are the Command and Staff Nonresident Instruction Program and the Army War College Corresponding Studies Program.

COL. JAMES A. SULLIVAN

OCS GRADUATES

An important source of officers for the Active Army is the Officer Candidate School (OCS). Annually, this program provides 900 officers to the active Army, each with a three-year service obligation.

Under an approved policy to be implemented in Fiscal Year 1983, the graduates who finish in the top third of their class will be offered early integration to the Regular Army provided they are otherwise qualified and after they successfully complete an officer basic course. This will enable the chain of command to recommend for or against integration, depending on the officer's performance in his basic course or in his first duty assignment. The details are being announced in a forthcoming change to AR 601-100.

OCS is 14 weeks long and is open to qualified soldiers, both men and women. Roughly half the candidates come from the Active Army; the remainder enter through the OCS enlistment option offered by the Recruiting Command. Active duty entrants must have completed two

years of college while enlistees must have completed a baccalaureate degree.

USMA GRADUATES

Beginning with those who belonged to the Class of 1975, U.S. Military Academy graduates are appointed in the Regular Army and predominantly assigned to Armor, Air Defense Artillery, Field Artillery, Infantry, Engineer, Military Intelligence, Military Police, or Signal branches, with a five-year obligation. At least 80 percent must serve in the combat arms (IN, AR, FA, AD, AV and EN). The remaining 20 percent may compete for combat service and combat support arms branches.

All graduates of USMA who are physically qualified for commissioning normally will be commissioned in the U.S. Army. Approval by the Secretary of the Army for a graduate to be commissioned in another service is granted only under the most unusual circumstances.

Those who have been physically disqualified from the combat arms at the time of graduation may select assignment to Military Intelligence, Military Police, Ordnance, Quartermaster, or Transportation.

Graduates will attend their respective officer basic courses before their first assignments.

Ranger training will be made available for officers who are scheduled for Ranger assignments and on a competitive basis for all male combat arms and combat support arms volunteers. Quotas are allocated to eligible branches on the basis of the previous year's utilization. The majority of the quotas are allocated to the combat arms officers, with Infantry officers receiving the

highest percentage.

Airborne training will be made available for officers whose assignments are to airborne units and as voluntary precommissioning training for USMA cadets. Others may attend training after commissioning on a competitive basis. Enough quotas have been available to allow all physically qualified volunteers to attend.

ROTC GRADUATES

The primary purpose of maintaining the ROTC program is to procure commissioned officers to meet the needs of the Active Army and the Reserve Components, and to meet mobilization requirements. Officers who are commissioned through the ROTC program are required to perform an initial period of active duty, plus Reserve duty, for a total combined obligation of six years or, if not needed on active duty, to perform three to six months of active duty, plus Reserve duty, for a total combined obligation of eight years.

Under certain circumstances an ROTC graduate may obtain a delay in his call to active duty to pursue a postgraduate degree. Delays are granted in increments of one year and must be renewed each year until the individual obtains his degree.

Graduates from the ROTC program are normally scheduled to enter an initial period of active duty during the fiscal year following their graduation and appointment. The specific month they will begin active duty is primarily based upon service school course quotas.

There are several categories of ROTC graduates and different procedures for their assignment:

Scholarship cadets. Cadets who are attending a college or university under the Army's financial assistance program for one to four years and are enrolled in ROTC are required to serve on active duty for a period of four years.

A Department of the Army board, normally held during the cadets'

senior year, selects the branches for the scholarship cadets. The cadets themselves may apply for all branches; selections and assignments are based on criteria established by DCSPER.

Distinguished Military Students (DMSs). The Professor of Military Science in each Army Senior ROTC unit is authorized to designate certain qualified cadets in his unit as Distinguished Military Students (DMSs). This is normally done in the cadet's senior year after he attends a summer camp.

The final selection of DMS cadets for the Regular Army and their assignment to various branches are accomplished by the same DA board that considers scholarship cadets for RA appointments. A DMS may also apply for any branch. Branch quotas for DMSs and scholarship cadets are established by DCSPER. Because consideration for appointment of a DMS in the Regular Army is voluntary, DMSs must apply for such appointments if they want to be considered.

After graduation, a DMS who has been previously selected for appointment in the Regular Army by the DA Board and who has maintained his eligibility is designated a Distinguished Military Graduate (DMG) and, upon his acceptance of a regular commission, is appointed in the Regular Army.

Other than Regular Army (OTRA). OTRA officers are given branches by a MILPERCEN panel made up of serving Professors of Military Science representing the four ROTC regions. Newly commissioned officers are called to active duty over a twelve-month period and attend their officer basic branch courses before their first duty assignments.

OTRA officers from both ROTC and OCS are encouraged to apply for Competitive Voluntary Indefinite (CVI) status before they complete their three-year obligated tours. Upon beginning their CVI tours (third or fourth year), they are encouraged to apply for Regular Army commissions. If selected, they may be

offered RA commissions at the end of their third or fourth year of commissioned service.

Graduate Degree Delay. ROTC graduates who have been on a delay status for the purpose of graduate study are given utilization tours commensurate with their advanced education if at all possible.

Initial branch assignments for all ROTC graduates are based upon the needs of the Army (branch quotas), the desirability of balancing the worldwide distribution of RA lieutenants, an officer's academic background, an officer's preference, and the order of merit of all the officers.

The DMGs who do not apply, or who apply but are not selected, for the Regular Army are normally given their preference in branch selections over the non-DMG OTRA officers.

A DMS who is selected to the Regular Army and becomes a DMG but elects not to accept his appointment will normally be appointed in the USAR branch he originally selected.

All lieutenants will attend their officer basic courses. Ranger training will be made available for combat arms, Engineer, and Signal Corps officers, and as voluntary precommissioning training for all ROTC cadets. Airborne training will also be made available to officers who volunteer for it, and ROTC cadets who are now in their junior or senior years will continue to be eligible for airborne and ranger training after commissioning regardless of their anticipated assignments or OPMS specialties.

The top five percent of those scholarship and non-scholarship cadets selected for RA commissions may elect to attend advanced civil schooling any time within the first five years of active commissioned service (effective until the Class of 1978).

Officers who are attending advanced civil schooling under this program incur an active duty obligation equal to three times the length of the schooling, computed in days. The obligations resulting from ROTC and

civilian schooling will be served in succession, and the time spent attending civilian school will not be credited toward fulfilling an ROTC obligation.

REVISED CGSC SELECTION

A new procedure for selecting officers to attend command and staff college level schooling was approved in 1980 and will be phased in beginning with the classes scheduled for the 1982-83 academic year.

The need to devise a new selection system stemmed from stability criteria that precluded the early movement of officers to attend intermediate level schools. Under the new procedure, an officer will have four chances to be selected for resident attendance; selection will occur earlier in his career; he will compete only against other officers in his own year group for available seats; captains will be allowed to attend; and once selected, each officer will attend on the basis of his availability.

The general details of the selection system are as follows:

- Each year group will be assigned one year's supply of seats (about 950).
- An officer will be considered during his eighth to eleventh year of Active Federal Commissioned Service (AFCS).
- He will attend some time during his ninth to fourteenth year of AFCS.
- Of the available seats, 15 percent will be filled with officers in their eighth year of AFCS, 15 percent with officers in their ninth year, 35 percent with officers in their tenth year, and 35 percent with those in their eleventh year.

It is expected that it will take two years to fully implement the new selection system.

COMBINED ARMS AND SERVICES STAFF SCHOOL

The Review of Education and Training for Officers (RETO) Study

determined that there was a need for all officers to be trained as staff officers, but there was no course in the officer training system that was primarily designed to teach staff skills. As a result the Army established the Combined Arms and Services Staff School (CAS³) at Fort Leavenworth, Kansas. The school began operations in Fiscal Year 1981 with full implementation expected in Fiscal Year 1985. It is also expected that CAS³ will be taught in Europe when it has been fully implemented.

During the graduated implementation, officers will be selected to attend by their career management divisions on the basis of the number of seats available and the specialty composition of each class. Officers selected will be in their seventh to ninth year of Active Federal Commissioned Service (AFCS) and will attend in a temporary duty (TDY) status.

Class loads during the graduated implementation period will be:

- Fiscal year 1982: three classes of 240 officers, or a total of 720.
- Fiscal Year 1983: four classes of 240 officers, or a total of 960.
- Fiscal Year 1984: four classes of 240 officers, 960 total.

When the course has been fully implemented, all OPMD-managed officers will attend sometime during their seventh to ninth year of AFCS. Selected officers from the Reserve Components, JAG, AMEDD, and Chaplain Corps will also attend. Once developed and validated, CAS³ will have a required 120-hour nonresident instruction (NRI) phase with a locally administered six-hour examination. The successful completion of the NRI portion will be a prerequisite for resident attendance.

The initial classes are 12 weeks long, but they will be reduced to nine weeks on full implementation.

SPECIALTY DESIGNATION PROCESS

In the Army's concept of dual specialty development for its officers, the objective is for each officer to

gain and maintain proficiency in two specialties. These specialties are designated on the basis of Army requirements and the officer's education and experience, his demonstrated performance and potential, and his preferences.

Specialties are designated by the following processes:

Initial Specialty Designation. All officers are designated an accession specialty upon entry on active duty. Accessions of active duty officers are distributed to the career management divisions by the Procurement and Accessions Branch, Personnel and Training Division, after the branch of each officer has been determined. Officers taken into a branch with which multiple specialties are associated will be apportioned among those specialties by the career management divisions on the basis of the objectives outlined in the Officer Accession Plan.

Event Oriented Specialty Designation. Officers who attend graduate school under the partially or fully funded programs or who attend flight training will be given the specialty associated with that event.

Permissive Specialty Designation. An officer may be given another specialty on the basis of his request to his assignment division at any time. If the officer is qualified in the judgment of the assignment division (through experience, military training, or civilian education) his request may be approved.

Eighth Year Specialty Designation. Each officer will be designated two specialties before he completes eight years of commissioned service. The Eighth Year Process is used to designate another specialty for any officer who has not been given one through either the Event or the Permissive Designation Process.

The requirements for each specialty are determined by the requirements at the ranks of colonel, lieutenant colonel, and major and by the average attrition rates and the desired utilization rates. These requirements are then adjusted on the basis of the size of the year group being con-

sidered, and priorities are established by the Director of Officer Personnel Management to determine the designation objective for each specialty. The objective is then proportionally distributed to the career management divisions where the decisions are made on specialty designations.

Each officer receives an information packet and a specialty preference form through his military personnel officer (MILPO). He indicates his desire on the form for four specialties in the order of preference and returns it to the MILPO, who forwards it to MILPERCEN. The career management division conducts a file review of each officer in the year group to determine educational background and experience and to decide which specialties, if any, most closely align with them.

When the process is completed, all officers are notified of their specialties through their MILPOs.

Tentative Specialty Designation. Officers who have degrees in academic disciplines that support certain specialties will be tentatively designated in those specialties early in

their careers.

This program began in 1980 with Year Group 1979 officers who were notified while at their officer basic courses of the specialties that their backgrounds supported. An officer is not "locked in" a specialty by this process, but it does provide a basis for planning and opens a dialogue between him and his assignment manager on matters of training development.

Current specialties open to this process are:

SC 21 Engineer
 SC 27 Communication-Electronic Engineering
 SC 37 Electronic Warfare/Cryptology
 SC 44 Finance
 SC 45 Comptroller
 SC 49 Operations Research Systems Analysis
 SC 52 Atomic Energy
 SC 53 Automated Data Systems Management

minor effect in the near future on Army Reserve officers.

For officers in the active component, CAS³ is meant to fit between an officer's advanced course and the Command and General Staff College. For Army Reservists, however, it is the full equivalent to the CGSC.

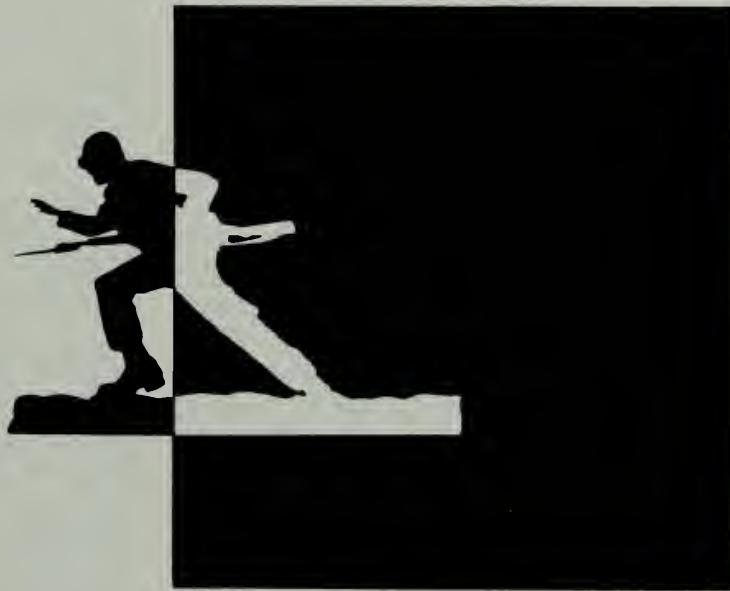
Although the Army has no immediate plans to introduce CAS³ into the USAR education system as an additional officer education requirement, Reserve officers may apply to attend the resident course. This nine-week course at Fort Leavenworth, Kansas, is preceded by a 15-part correspondence course phase. The completion of CAS³ will satisfy USAR requirements for promotion to lieutenant colonel.

Prerequisites and application procedures for the course as well as for other USAR officer education courses are listed in HQDA letter 140-81-1, dated 17 March 1981.

Any officer who is interested may obtain more information by calling the Operations and Training Division of the Office of the Chief, U.S. Army Reserve, at (202) 325-8480 or AUTOVON 221-8480.

CAS³ FOR USAR OFFICERS

The Army's new Combined Arms and Services Staff College, called CAS-cubed or CAS³, will have only



BOOK REVIEWS

In our September-October 1981 issue we gave you the names and addresses of five dealers in used and out-of-print military books. Here are two more names you can add to that list:

- RUTGERS BOOK CENTER, 127 Raritan Avenue, Highland Park, New Jersey 08904.

- Q.M. DABNEY AND COMPANY, INCORPORATED, PO Box 42026, Washington, D.C. 20015.

We believe you will find them responsive to your requests.

We also call your attention to four magazines that we think you will find interesting as well as informative. The first is *BUFFALO* (APA Communications, PO Box 879, Manchaca, Texas 78652), which is published "for the Black American Military Professional." Another is *MILITARY IMAGES* (published by Harry Roach, 706 Mickley Road, Whitehall, Pennsylvania 18052), a magazine that aims at "preserving the visual history of the American fighting man, 1839-1939."

The other two magazines are published in Israel by Eshel-Dramit Limited, PO Box 115, Hod Hasharon, Israel. They are *BORN IN BATTLE*, which carries accounts of both past and present military campaigns, and *MILITARY ENTHUSIAST*, which covers mainly military equipment and organization.

All four of the magazines will send you information on their subscription terms and prices.

We also mentioned in our November-December 1981 issue some of the books we received in recent months that we thought you should know about. Many of them should be in your local library. Here are more titles.

In the reference field, we received these excellent publications:

- SOVIET ARMED FORCES ANNUAL, VOLUME 4. Edited by David R. Jones (Academic International Press, 1980. 416 Pages. \$45.00). This fourth issue in this most important series contains almost 70 more pages of material than its predecessor volumes, several new sections, and many more tables and figures. Various experts in the field discuss Soviet ground forces, strategic rocket forces, airborne troops, and air force and naval efforts. This series has become an indispensable reference tool.

- THE MILITARY BALANCE, 1981-1982 (Published by the International Institute for Strategic Studies, London. 136 Pages. \$14.00, Paperbound). This is the twenty-second issue of this very fine reference publication, one that has gained a worldwide reputation for its factual presentations. In addition to presenting its usual country-by-country statistics, the Institute spells out three troubling problems the world faces in the military area: the economic strain on many countries maintaining large standing military forces; the Soviet Union's modernization of its theater nuclear forces; and the possibility of increasing military confrontations in the so-called Third World.

- HISTORICAL JOURNALS: A HANDBOOK FOR WRITERS AND REVIEWERS. By Dale R. Steiner (ABC-CLIO, Santa Barbara, California, 1981. 213 Pages.) Many professional military people like to write for historical journals. The author lists information about more than 350 such journals and offers some cogent advice on writing articles and book reviews.

We also received these three outstanding publications from the Army's Center of Military History: *INTEGRATION OF THE ARMED FORCES, 1940-1965*. By Morris J.

MacGregor, Jr. (Defense Studies Series, 1981. 647 Pages. \$17.00); *THE ARMY MEDICAL DEPARTMENT, 1775-1818*. By Mary C. Gillett (Army Historical Series, 1981. 299 Pages. \$11.00); and *VIETNAM FROM CEASE-FIRE TO CAPITULATION*. By Colonel William E. LeGro (1981. 180 Pages, Paperbound). These publications are available from the U.S. Superintendent of Documents. The Center has been putting out many fine publications over the years and you should make an effort to become familiar with its works.

On the Civil War era, we found these three books most interesting:

- REFLECTIONS ON THE CIVIL WAR. By Bruce Catton. Edited by John Leekley (Doubleday, 1981. 246 Pages. \$15.95). One "listens" to this book rather than "reads" it. A form of oral history, the book was prepared from tape recordings originally made by Catton some years ago for distribution to educational institutions. Catton's thoughts "listen" well, although he offers little that is new.

- THE IMAGE OF WAR, 1861-1865: VOLUME I, SHADOWS OF THE STORM. Edited by William C. Davis. A Project of The National Historical Society (Doubleday, 1981. 464 Pages. \$35.00). Outstanding in every respect, this book is the first of a planned five volumes. It contains more than 600 photographs, and the text is limited to what has to be said. The bulk of photographs have never before been published. Every phase of the war is covered, including the home fronts. Don't miss it.

- THE HARDTACK REGIMENT: AN ILLUSTRATED HISTORY OF THE 154th REGIMENT, NEW YORK STATE INFANTRY VOLUNTEERS. By Mark



H. Dunkelman and Michael J. Winey (Fairleigh Dickinson University Press, 1981. 211 Pages. \$19.50). An interesting account of a Northern infantry regiment from its organization in September 1862 to its mustering out in June 1865. It fought in both the eastern and western theaters of operations and was with Sherman's army on the famous march to the sea.

World War II happenings have also been the subject of a number of recently published books:

- **NORMANDY: THE BRITISH BREAKOUT.** By Major J.T. How (London: William Kimber and Company Limited, 1981. 238 Pages), and **PATTON'S GAP: AN ACCOUNT OF THE BATTLE OF NORMANDY, 1944.** By Major General Richard Rohmer (Beaufort Books, 1981. 240 Pages. \$14.95). In these books, a Canadian author (Rohmer) and a British author (How) criticize the overall Allied commander in Normandy in August 1944, General Bernard Law Montgomery, for his failure to trap more of the German forces in the Argentan-Falaise area. Rohmer saw the unfolding events from the cockpit of a fighter-reconnaissance aircraft, How as a member of the British 11th Armored Division. How's narrative is particularly good for its description of numerous small unit actions, Rohmer's for presenting the problems of air-ground coordination that plagued the Allied high command at this most crucial time.

- **ROMMEL'S WAR IN AFRICA.** By Wolf Heckmann. Translated from the German by Stephen Seago (Doubleday, 1981. 366 Pages. \$14.95). A former journalist and World War II veteran, the author is quite critical of Rommel the man and of Rommel the leader. Although he wrote the book for German readers, Heckmann's narrative is useful to military professionals of all countries, because from it they can gain much from his study of one of World War II's most interesting (and perhaps over-rated) battlefield commanders.

- **THE BATTLE FOR CASSINO.**

By Janusz Piekalkiewicz (Bobbs-Merrill, 1980. 192 Pages. \$16.95). A day-to-day account of the events that made up one of World War II's greatest infantry battles. The author follows the movements on both sides, although some may not like the way the narrative runs its daily course. He does give the Polish units their due credit.

- **THE FRENCH RIVIERA CAMPAIGN OF AUGUST 1944.** By Alan F. Wilt (Southern Illinois University Press, 1981. 208 Pages. \$15.00). The author, an associate professor of history at Iowa State University, details in this book the events that led up to DRAGOON, the Allied landing in southern France in mid-August 1944, and the results of it. He feels that "while Dragoon may not have been decisive in winning the war, it was a highly significant operation," but admits that not all U.S. and British military historians agree with him. But Wilt presents a number of strong arguments to support his findings, and they just might be too strong to overcome.

- **VICTORY AT GUADALCANAL.** By Robert Edward Lee (Presidio Press, 1981. 260 Pages. \$15.95). Written in a light, almost breezy' style, with many conversational bits thrown in for good measure, the author — who served with an Army unit on the island — recalls the highlights of the fighting for Guadalcanal, the first step on the long road to Tokyo.

Now, here are several of our longer reviews:

MOUNTED COMBAT IN VIETNAM. By Donn A. Starry (Superintendent of Documents, U.S. Government Printing Office, 1977. 250 Pages). Reviewed by Lieutenant Colonel Samuel B. Jones, United States Army Reserve.

This monograph provides an account of the operations of armored units of the U.S. Army and also describes mounted combat of the French, South Vietnamese and North Vietnamese armies in Vietnam. The term "armored" is used to refer to those units whose primary method of

fighting was mounted, and it includes tank and mechanized infantry companies and battalions, and armored cavalry and air cavalry troops and squadrons.

It was prepared between 1973 and 1976 by a task force at Fort Knox directed by then-Major General Donn A. Starry. Fresh from the Vietnam battlefields and ably qualified for the task at hand, Starry had been a member of the 1966 study group, "Mechanized and Armored Combat Operations, Vietnam," which had evaluated armored operations in Vietnam. In 1969, Starry had assumed command of the distinguished 11th Armored Cavalry Regiment and had actively engaged in mounted combat operations in Vietnam.

Basically, Starry's monograph provides a chronology of mounted combat in Vietnam beginning with the operations of the French Army and the South Vietnamese Army followed by a description of the build-up of U.S. armored forces in Vietnam. It examines and explains how armor operations were conducted until the close of the conflict. These descriptions are followed by Starry's personal reflections.

General Starry's thesis is clear: mounted combat is possible in tropical, underdeveloped countries even when the front lines are not clearly defined. He passionately believes in the capability of well-trained and well-led armor units. In fact, the major criticism of the monograph is that he sometimes overstates his case. This may stem from his natural enthusiasm for armored cavalry and for other armor units, but it does obscure the broad perspective.

The U.S. Army must prepare for future challenges, and any study of previous experiences can help. For this reason I recommend this monograph not only to combat arms officers but to logisticians as well.

THE VIETNAM WAR: THE ILLUSTRATED HISTORY OF THE CONFLICT IN SOUTHEAST ASIA. Edited by Ray Bonds. A

Salamander Book (Crown Publishers, 1979. 248 Pages. \$17.95).

Fourteen knowledgeable and highly qualified historians join Ray Bonds to produce what must rank as one of the better histories to date of the war in Vietnam. Among those historians are Bernard C. Nalty and Charles B. MacDonald, both formerly with the Army's Center of Military History; William Lee Hammond, now with the Center; and Ray L. Bowers, from the Office of Air Force History.

The book has 24 separate essays, an index, a chronology of the war's main events, a list of the key individuals, and a foreword by General William Westmoreland. Its large size lends itself admirably to the accompanying graphics — hundreds of photographs, numerous drawings, and a multitude of maps, tables, and charts.

This is an excellent publication, and it should be regarded as a standard reference work on the Vietnam War.

ON A FIELD OF RED: THE COMMUNIST INTERNATIONAL AND THE COMING OF WORLD WAR II. By Anthony Cave Brown and Charles B. MacDonald (Putnam's, 1981. 718 Pages. \$19.95). Reviewed by Colonel James B. Motley, United States Army.

The authors contend that those who believe the Cold War began with the end of World War II make a "serious inaccurate historical assumption." They believe the Cold War began in January 1919 in the aftermath of the Bolshevik Revolution when Lenin proclaimed the formation of the Communist International (Comintern), whose task was to fight a secret war against the capitalist states using highly trained subversives to overthrow those governments and to establish the "dictatorship of the proletariat."

The authors have drawn heavily on a mass of material that has recently been made available; they also discuss a host of actors. They divide their

book into three main parts and include a six-page bibliography and extensive endnotes.

Unfortunately, the book is marred by two obvious deficiencies: There are many typographical errors, and the authors apparently accept their new material in an uncritical and unquestioning fashion.

Regardless of these shortcomings, the book does provide additional insights into the relationship between the United States, other Western powers, and the Soviet Union. It is a most relevant book for the serious student of Soviet politics.

BENEATH THE EAGLE'S WINGS. By John Curtis Perry (Dodd, Mead, 1980. 253 Pages. \$12.95). Reviewed by Major C.T. Guthrie, United States Army.

Serious military historians and casual readers of history as well will find this book enjoyable and informative. The author is associated with Harvard University's Japan Institute and is eminently qualified to discuss the subject of the occupation of Japan by United States forces.

He believes the success the U.S. enjoyed in its occupation policies was gained despite its ethno-centrism, racism, and general ignorance of the Japanese culture; he also believes that the U.S. and Japanese interactions during the occupation period, which ultimately led to an almost total change of direction for the Japanese nation, represent a high point of U.S. history.

The author was exceptionally thorough in his preparatory efforts, and he includes extensive footnotes and a comprehensive bibliography for the serious history student. He also presents a pleasing, highly enjoyable writing style that belies the wealth of factual historical information he includes in his book.

His book represents a significant contribution to academic literature on the Japanese occupation. It demands your utmost consideration. That the book is so pleasurable to read merely adds to its value.

THE UNKNOWN BATTLE: METZ, 1944. By Anthony Kemp (Stein and Day, 1980. 250 Pages. \$10.95). Reviewed by William M. Brooks, Wrightsville Beach, North Carolina.

Anthony Kemp is a distinguished expert in the field of military architecture and fortifications. He is also the founder and chairman of the International Fortress Study Group.

Here, he presents us with a very good book that deals with three controversial but related subjects: the strategy and tactics of the Metz campaign; the argument between Generals Montgomery and Patton over the priority of supplies; and the military value of stationary fortifications.

In the late summer of 1944, General Patton's Third U.S. Army was before the Moselle and Lorraine plateaus; it was poised to pursue the retreating Germans into the Saar and back to the Rhine River. But its tanks were out of fuel and its lines of supply were stretched to their utmost across the plains of central France.

Patton hinted to his subordinates that there was a conspiracy to rob him of his chance to "end the war in '44." But, as the author explains, it was Montgomery's abortive effort to take the Rhine bridges in the north that received priority and, therefore, condemned Patton's army to sit on the sidelines and to wage a war for which its commander had neither the talent nor the inclination.

Securing a bridgehead over the Moselle River, though, and occupying the city of Metz, which Patton was determined to do, meant capturing a series of fortresses that were impervious to even the heaviest air and artillery bombardments. In fact, it was these fortresses, built nearly 50 years before, that enabled a weak but determined German force to resist and, for a time, to stop the Third Army. The battle for Metz, then, became the last time in the history of modern warfare when supposedly outdated fortresses played a decisive role against a mechanized army.

The Metz campaign was fought

chiefly by infantrymen, artillerymen, and engineers. Both sides struggled with inadequate supplies, a lack of reserves, and appalling weather. Whether the battle should have been fought is a matter of opinion, and the reader is left to make up his own mind. The author concentrates his efforts on criticizing the tactical direction of the fighting. He believes, for example, that many lives were wasted in futile attacks on fortified positions.

If there was any glory in the battle, it belonged to the junior officers and enlisted men on both sides. It was a classic example of the horrible face of war.

Colorfully written and loaded with first-hand accounts, Kemp's work lacks only in photographs. He has written a fine account of a campaign too long forgotten.

GRANT: A BIOGRAPHY. By William S. McFeely (Norton and Company, 1981. 592 Pages. \$19.95). Reviewed by Colonel Robert G. Clarke, Office of the Joint Chiefs of Staff.

This is an outstanding volume, lucidly written, thoroughly researched, well-documented, and finely drawn. The author is a professor of history at Holyoke College and his narrative is a splendid account of a man whose career dashed back and forth between anonymous failure and vast public acclaim. Grant was one of our nation's most improbable heroes — a common man, but one who possessed uncommon qualities that could be called forth at critical times.

Grant's career is generally well known — his service during the war with Mexico, his problems after the war, his leaving the Army in 1854, and his failure at business from then to the outbreak of war in 1861. A little more than three years later, though, Grant was a Lieutenant General commanding the Northern armies. He saw clearly that the war required a total effort on the part of the Northern people, and he had a clear appreciation for the geography,

demographics, and logistics involved.

He carried out his final plans for the destruction of the Confederacy with consummate energy and skill and was eventually hailed by the men he led and the people of the country as their greatest military hero. After eight years as President of the United States, he retired to write his memoirs.

The author concludes that Grant "had no organic, artistic, or intellectual specialness. He did have limited though by no means inconsequential talents to apply to whatever truly engaged his attention. The only problem was that until he was forty, no job he liked had come his way — and so he became a general and president because he could find nothing better to do."

This is a special book and it belongs in your library if you are at all serious about history.

FLYING BOMB: THE STORY OF HITLER'S V-WEAPONS IN WORLD WAR II. By Peter Cooksley (Scribner's, 1979. 208 Pages. \$12.50). Reviewed by Captain Don Rightmyer, USAF, Directorate of Soviet Affairs, Washington, D.C.

The story of the V-1 and V-2 (Hitler's "revenge" weapons) during World War II is an interesting look at advanced weaponry and a prelude to the space efforts of the thirty years that followed the end of the war. Even though both machines were primitive in design and suffered high failure rates, they were quickly snatched up by the Soviet Union and by the United States after the war because of the wealth of technical information.

The author promises to tell that story in his book, but he fails miserably. What actually appears in the 150 pages of narrative is a collection of newspaper and personal accounts of life in England under the shadows of Hitler's "flying bomb." The author promises a non-technical account in his preface but then devotes twelve pages to a detailed discussion of the innermost workings

of the V-1. This detail is necessary only if you plan to build one.

Finally, the book is poorly written and organized, although its appendices might be of interest to modelers and museum curators. In sum, the dust jacket calls the story of the V-weapons a largely untold one; this book does little to change that.

MERC: AMERICAN SOLDIERS OF FORTUNE. By Jay Mallin and Robert K. Brown (Macmillan, 1979. 216 Pages. \$14.95). Reviewed by Leroy Thompson.

Few authors could treat this subject with as much knowledge and experience as these two men. Robert K. Brown, who publishes *Soldier of Fortune* magazine, has probably done more with his publication to foster public interest in and awareness of contemporary soldier-adventurers than all the other media combined. Jay Mallin, who is affiliated with Brown's magazine, is an expert on Latin America and terrorism.

Their book, therefore, is an apologia but not an apology for modern mercenaries. They obviously admire the courage and fighting ability of the men they write about but they do not gloss over the character flaws and psychological quirks that explain why some men choose to be warriors outside of the conventional military system.

By treating individually a few of the more prominent modern American professional adventurers, the authors manage to give the reader an insight into the breed. One of the most obvious misconceptions that the book clears up is the myth that men become mercenaries for money. Virtually every individual mentioned in this book had some incentive other than pay; in many cases, belief in a cause was the only motivation.

I recommend this book for students of modern brushfire wars or wars of liberation, because it contains many never before published narratives of the fighting in Angola, Rhodesia, and Nicaragua. Lovers of adventure who happen to be profes-

sional soldiers should also find this an interesting work.

THE REVOLUTIONARY ARMIES: THE HISTORICAL DEVELOPMENT OF THE SOVIET AND THE CHINESE PEOPLE'S LIBERATION ARMIES. By Jonathan R. Adelman (Greenwood Press, 1980. 230 Pages). Reviewed by Dr. Joe P. Dunn, Converse College.

Jonathan Adelman of the Graduate School of International Studies at the University of Denver contends that Soviet and Chinese civil-military relations have not been adequately explored. A survey of his excellent selective bibliography, including works in both English and Russian, calls this proposition into question. Nevertheless, Adelman has written a significant study that places him in the company of those — John Erickson, Raymond Garthoff, Samuel Griffith, and the like — who have written on the subjects in question.

The author focuses on the civil war experience that followed the revolution in each country. Therein, he believes, lies the difference between the Red Army and the PLA. The Soviet Army has been apolitical and has played only a small role in the policymaking process. It has never been invoked as a role model for society. Few Soviet generals have achieved significant political power.

Conversely, the PLA has been at the center of Chinese politics. The Chinese Politburo has always contained several high ranking military men, and the political leadership must cultivate the military to remain in power. Not even Mao was exempt. During and following the Cultural Revolution, the military services were the decisive political force in China, and they remain formidable today.

This is a fine study in comparative communism and civil-military relations. It is packed with details about the two armed forces and includes valuable tables. It is well documented and tightly written. In sum, it is a first-rate contribution.

NAM: THE VIETNAM WAR IN THE WORDS OF THE MEN AND WOMEN WHO FOUGHT THERE. By Mark Baker (William Morrow, 1981. 324 Pages. \$12.95). Reviewed by Lieutenant Colonel Richard J. Rinaldo, Armed Forces Staff College.

When the tocsin sounds, the job of soldiers is to hurt people and break things. There was plenty of both in Vietnam. But to believe Mark Baker, that's all there was.

Few of the oral histories in this book go further than to rehash the worst of the war and its aftermath for the Vietnam veteran. For the most part, the book is a dirge of the lost and the forlorn — doped-up crazy losers doing war crimes and atrocities. It joins a genre — up to now mostly made up of novels — that depicts the war and its warriors as sad, sick, and sickening.

Unlike *Everything We Had* by Al Santoli, published about the same time, the first person accounts in this compilation are not identified. This leads to a lack of credibility for the book as a whole.

There are a few good stories and the author seems sincere in his efforts to tell what it was like for the soldier in Vietnam. Unfortunately, Baker is not a veteran. So his internal caliper for truth does not measure well. In any event, the result is, to use one of his favorite words, "wasted."

RECENT AND RECOMMENDED

DEFENCE BY MINISTRY: THE BRITISH MINISTRY OF DEFENCE, 1944-1974. By Franklyn A. Johnson. Holmes and Meier, 1980. 234 Pages. \$42.50.

THE POLITICAL ECONOMY OF FOREIGN POLICY BEHAVIOR. Edited by Charles W. Kegley, Jr., and Pat McGowan. Sage International Yearbook of Foreign Policy Studies, Volume 6. Sage Publications, 1981. 300 Pages. \$9.95, Paperback.

VICTORY WITHOUT WAR. By Lieutenant Colonel Charles McGinn, United States Air Force, Retired. Hwong Publishing Company, 1980. 149 Pages.

FRITZ: THE WORLD WAR I MEMOIRS OF A GERMAN LIEUTENANT. By Fritz Nagel. Edited by Richard A. Baumgartner. Hunting-

ton, West Virginia: Der Angriff Publications, 1981. 160 Pages. \$6.95, Softbound.

OUR WAR: AUSTRALIA DURING WORLD WAR I. By Brian Lewis. Melbourne University Press, 1980. 328 Pages. \$26.00.

WAR IN THE OUTPOSTS. By Simon Riggs and the Editors of Time-Life Books. Little, Brown and Company, 1981. 208 Pages. \$12.95.

THE ON-YOUR-OWN GUIDE TO ASIA. Revised Fifth Edition. Edited by John Doll and Terry George. Charles E. Tuttle Company, 1981. 383 Pages. \$4.95, Paperback.

ALL-ASIA GUIDE. Completely Revised 11th Edition, 1980. Distributed by Charles E. Tuttle Company. 682 Pages. \$7.95, Paperback.

HOW LITTLE IS ENOUGH? SALT AND SECURITY IN THE LONG RUN. By Francis B. Heober. National Strategy Information Center, Inc., 1981. 58 Pages. \$5.95, Paperback.

P-47 THUNDERBOLT AT WAR. By William N. Hess. Charles Scribner's Sons, 1980. 160 Pages. \$17.50.

MISSILES OF THE WORLD, 3d Edition. Michael J. H. Taylor. Charles Scribner's Sons, 1980. 152 Pages. \$14.95.

THE LUFTWAFFE IN THE BATTLE OF BRITAIN. By Armand van Ishoven. Scribner's, 1981. \$29.95.

ALPINE ELITE: GERMAN MOUNTAIN TROOPS OF WORLD WAR II. By James Lucas. Jane's Publishing Incorporated, 1980. 226 Pages. \$19.95.

DOUGLAS MacARTHUR: THE PHILIPPINE YEARS. By Carol Morris Petillo. Indiana University Press, 1981. 301 Pages. \$17.50.

SOVIET BLOC MERCHANT SHIPS. By Bruno Bock and Klaus Bock. U.S. Naval Institute Press, 1981. 269 Pages. \$29.95.

INSIDE AND OUT: HOSTAGE TO IRAN, HOSTAGE TO MYSELF. By Richard Queen. G.P. Putnam's Sons, 1981. 286 Pages. \$13.95.

AN AUSTRALIAN ARMY CADET UNIT, 1945-1977. By K.G. Mortenson. Victoria, Australia: Gerald Griffin Press, 1979. 415 Pages. \$21.00.

THE 4TH MARINES AND SOOCHOW CREEK. By F.C. Brown, et.al. The Military Journal Special Number 3. International Graphics Corporation, 1981. 27 Pages. \$2.50, Paperbound.

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We will furnish a publisher's address on request.

INFANTRY LETTERS



SEPARATE QUESTIONS

Dear Sir,

I have followed the recent articles on the possible change in military sidearms and now see the article on the M16 rifle (INFANTRY, September-October 1981, Page 22), which will probably reopen the M16 controversy. I feel compelled to point out that most if not all of the noise being generated on these subjects results from mixing two separate questions without identifying that they are separate. This confuses an already difficult issue.

Are we discussing weapons or ammunition? Many people object to the 5.56mm round used by the M16. Would they be happy with an AR10? Many others feel the M16 is an "inaccurate, unreliable piece of junk." Would they be happier with an FN-FAL? A mini-14? A Galil? The question of 5.56mm versus 7.62mm is separate from the question of accuracy and reliability.

Regarding ammunition, the point usually addressed is "knock-down power" (called "stopping power" in handgun discussions) and "lethality," when comparing the 5.56mm to the 7.62mm, or the 9mm parabellum to the .45.

It is unfortunate that these terms are never defined. Lethality is a measure of the seriousness of the likely injury, while stopping power is a measure of the probability that an antagonist will be immediately put out of action, regardless of the final result. Whether he dies or is up again in ten minutes does not matter to this measure. (A club has good stopping power.)

Most INFANTRY readers are probably aware that the .45 is accepted as having significantly greater stopping power than the 9mm, while

lethality studies show that the 9mm is equal or superior. (*Defensive Handgun Effectiveness*, by C.E. Peters, c1977, is probably the best book available on the subject.)

Obviously, we would like a round with both good stopping power and high lethality. But in the real world, trade-offs are usually necessary.

Without going into great detail, I believe it has been shown (both analytically and in actual experience) that the 5.56mm round has excellent lethality but leaves something to be desired in stopping power, and that the 7.62mm has slightly inferior lethality (although not enough less to worry about) but far superior stopping power. Similarly, the 9mm has lethality equal or superior to that of the .45, but much less stopping power.

We can argue about the best mix of lethality, stopping power, long range ballistic accuracy, penetration, and light weight, but let us at least understand what we are arguing about.

By the way, in all of the articles and letters I've seen on this subject recently, a discussion of penetration was lacking. With modern materials, it is realistic to expect body armor to become common on the future battlefield. Even now, a three- or four-pound Kevlar vest will stop both a 9mm and a .45 round. As armor gets better, even rifles may need penetrator rounds by the end of this decade.

Regarding the question of the M16 rifle, while it is not my favorite (I prefer the mini-14) the advantages Mister Osborne discussed in his arti-

cle are real. The M16 has proved adequate over many years in many parts of the world. While we should look for a better light assault rifle, it does not serve the Army to keep repeating like a litany that "the M16 is a piece of junk." It can only decrease the confidence of the troops in their equipment and of the public in the Army. In the long run, it's counterproductive.

ABRAM MARK RATNER
CPT, USAR
Orange, New Jersey

APCs OF THE PAST

Dear Sir,

Even though I am retired, I have followed your articles on the IFV and especially enjoyed the one in the July-August 1981 issue ("The Future IFV," by Clifford D. Bradley, page 21), because it really came to grips with some points.

I must, however, take exception to some statements about the vehicles, because I had extensive training with the M75 and the M59 in Germany and with the M59 at Fort Hood, Texas.

The author states that the M75 had a top speed of 43 mph, but it was not uncommon in Germany for the 75 to hit 60 mph or more. That 360-horsepower aircraft motor and accompanying transmission were something. The M75 had a lot of power. There was no way the M59 could keep up with it. The M75 could keep up with the M48 easily, and we trained a lot with M48s at Wildflecken. When the snow flew, off came the track pads, and with grousers only, even the M48s couldn't stay with us.

The main problem with the M75 was that it was nose-heavy. A tail-

We welcome letters to the Editor on any subject that has been treated in our magazine as well as on issues of general interest to our readers. All letters are subject to editing and possible abridgment.

heavy tank could "float" over a small obstacle, where we would have to slow down and head into it if we did not want to stand on our nose. I have a scar on my head from bouncing off the overhead.

The article says that the M59 would top out at 32 mph. It might if it was new, if its motors were perfectly tuned, and if it had a tail wind. That monster was underpowered and should have had an automotive engineer for each vehicle to maintain it.

As for keeping up with tanks, forget it, especially cross country and uphill. But there was a trick that both the M59 and the M75 could do, but the M75 did it better: If the grade got a little too steep, they could back up a hill.

The article also forgets the experiments in Korea in which they took the turrets off and all the ammunition racks out of old M4 Shermans. I didn't ride in them but had many friends who did. They told me that with all that weight removed those old Shermans were really fast. They could carry a squad plus supplies and were used mainly to supply OPLRs and outposts. They attracted artillery fire, of course, but with their speed and with the soldiers wearing flak jackets and steel helmets they weren't too dangerous.

I like the idea of the stretched M113, because it is too small as it is. The M59 was fairly big inside but when it was combat loaded it could still get awfully crowded. We needed clips on the roof to hold the machinegun, its tripod, and the rocket launcher, as well as racks under the seats to hold the rifle ammunition and the .50 caliber ammunition boxes.

I agree we need firing ports, but there must be adequate vision. Might we not be starting a Maginot Line complex where a rifleman will be reluctant to dismount and just want to fire from the inside? To adequately support armor and his own vehicle, the infantryman must dismount, especially in close terrain. Those tanks are dead ducks without enough

infantry support from close-in attack, and dismounted is the only way the infantry can supply it.

APCs also need a quick, reliable refueling system. Refueling with Jerry cans with at most two or three men is hell, because the fuel is seldom close to the road. When the men get through, they're all soaked with fuel and completely whipped and ready to torch that metal monster.

I notice in your Infantry News section that the Soviets' new 5.45mm rifle uses hollow point ammunition. That constitutes a dum-dum *as defined by the Geneva Convention. Are we the only Army that tries to abide by those outmoded rules, rules that we never sanctioned by formally signing the treaty?

One last thing — the *Panzerfaust* made one helluva antivehicular booby trap.

LEO A. APPLING JR.
MSG (Ret)
Odem, Texas

NBC CONTAMINATION

Dear Sir,

In the July-August 1981 issue of INFANTRY (page 2), Major General David Grange addressed the need for breakout operations training. In particular, he stated that "a unit may become isolated and encircled because ... the enemy's use of NBC weapons either destroys or contaminates areas, thereby denying or blocking the unit's planned routes of displacement and communication."

An area that is contaminated by the use of NBC weapons is not necessarily denied to us by that contamination, but particular care must be taken in crossing that area. This is the reason one of the current ARTEP tasks for the Mechanized Infantry Tank Task Force is to cross or bypass a contaminated area. FM 21-40, NBC Defense, states on page 7-5: "In an exploitation, units are likely to be forced to cross a chemically contaminated area." FM 71-1, The Tank

and Mechanized Infantry Company Team, on page 1-13 states: "The force that can live in this environment (NBC) and still move, use terrain and overwatch, suppress and concentrate superior force, will defeat the side that cannot."

The U.S. Army will not always have the luxury of bypassing NBC contamination, and we must recognize that fact. There may well be times when the tactical advantages obtained by attacking an enemy's flank or rear through a contaminated area far outweighs the risk. Indeed, the unexpected use of such an area can create surprise, which is a decided advantage. Only the tactical commander can decide this. But we must train to cross these areas routinely to provide our commanders an opportunity to use all of the battlefield.

TIMOTHY B. SAVAGE
CPT, Chemical Corps
Fort Rucker, Alabama

MASTER GUNNER PROGRAM

Dear Sir,

I would like to offer a few ideas for infantrymen to consider and discuss.

I strongly believe the Infantry needs a master gunner program just as we have in the Armor branch. The Infantry master gunner would be a school trained antitank weapons trainer and would be assigned to TOE positions at all levels — company, battalion, brigade, and division.

Suggesting a master gunner program does not imply that the Infantry can't train its people. It is just the most effective and efficient way to stay on top of the mission of tank killing.

The master gunner would not take away any responsibility for training from the squad or platoon leaders, or the responsibility for setting guidelines and standards away from the commander. He would be the commander's trained advisor, just as the maintenance NCO or warrant officer is the advisor on maintenance.

The master gunner would manage

training resources — ammunition, training devices, ranges, time, and people. He would supervise the training of the unit's trainers and supervise the turret mechanics and armorers. With guidance from the commander, he would formulate the plans for gunnery — qualification, monthly sustainment, or integration into field training.

In the mechanized infantry company and battalion, the master gunner would be the commander's track commander or gunner on the APC or IFV. The master gunner should also be on the TOEs of non-mechanized infantry units with a combat position of operations sergeant.

A thought on unit armorers is that the job should be a special skill position, not the position of a 76Y. My experience has been that the best armorers are not 76Ys but 11Bs. I recommend we establish an armorer's school in which an ASI would be awarded. Normally, the armorer's MOS would be that of the predominant MOS of the company and, therefore, the individual would be familiar with the unit's weapons and their importance to the unit's ability to perform its mission.

I have not worked with the IFV and I know a lot of smart guys have, but I can't believe the firing port weapon can suppress out to ranges of 250 to

300 meters. I see that the task is in the draft field manual for IFV gunnery, and I see ranges being built at Grafenwohr for that task. I hope we aren't wasting time and money. I do have one idea for an additional use for these firing port weapons: When my battalion went through training at the German Infantry School, I felt we could have used the short automatic rifle with the assault teams clearing houses in "Bonnland" or clearing trenches in the forest-fighting phase.

Finally, I believe we need to put more emphasis on CP and TOC training. The subject may not be as exciting as maneuver, but command and control won't happen if we don't conduct training on how to do it.

SCOTT ADAMS
CPT, Infantry
8th Infantry Division

BOOTS AND HANDGUNS

Dear Sir,

I would like to join the discussion that has been in progress for the past several issues in your Letters section on the new boots and on the selection of a handgun.

For the past 12 years, I have worn a boot with a Vibram sole that is identical to that on the Army's new boot.

When it is clean the sole gives good traction on a variety of surfaces, but it picks up everything, and when it is clogged it is no better than a plain smooth sole.

This Vibram sole was never intended to be an all-purpose sole; it was intended to replace leather or hobnail soles on climbing boots. The problem with the standard Vibram sole is that the lugs are too small and too closely spaced. Thus, anything that gets in between the lugs tends to stay there. The U.S. manufacturer of Vibram soles has a slightly different version, called the *Securite*, which eliminates most of the clogging problems.

And just because a boot has a leather lining does not mean it will not need breaking in; leather that is so soft that it conforms to the shape of the foot upon first wearing is so soft that it will rapidly stretch out of shape. I've found that in such boots, the soles tend to outlast the uppers.

I agree that a steel-shanked boot is preferable to one without a shank, and in a well-designed boot the weight increases should be negligible.

My final comment on the new boot is that it is not very new. Civilian boot manufacturers have been making identical boots for years. The designers at Natick have maintained their record of being about twenty years behind the times. They have ig-

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



nored the revolution in boot design that has followed the great expansion in backpacking and mountaineering. The boots being offered by the more progressive makers are a far cry from the "new" G.I. boot.

As for the other controversy, I am totally opposed to the adoption of a 9mm service pistol, chiefly because it has been shown to be less effective than the .45.

Those who point to the FN-Browning M1935 "High Power" as John Browning's endorsement of the 9mm Parabellum might be interested in knowing that Browning originally designed the High Power for a 9.8mm/.40 caliber cartridge. He was no fool, though. He eventually settled for the 9mm round because the European military "experts" wanted it.

In 1910, Colt's salesmen had gone around Europe with a 9.8mm version of the pistol that was to become the M1911. They found that the "experts" were not interested; they wanted to go with such powerhouses

as the .30 Luger and the .32 ACP. But just because our friends screw up is no reason for us to do so.

I would have hated to be Sergeant Alvin York if he had had to stop those seven Germans with a 9mm instead of a .45. Most people don't know it, but York was charged at close range by the Germans who had waited until he had to reload his rifle. Seven men, seven shots. That's good enough for me.

ROY L. WILSON, JR.
Harlem, Georgia

MPs ARE SOLDIERS FIRST

Dear Sir,

I am writing in hopes of informing all infantry soldiers that Military Policemen are soldiers first and MPs second.

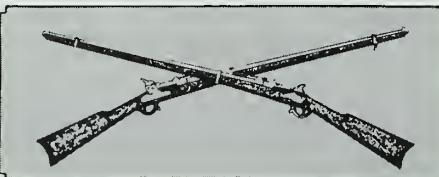
At the U.S. Army Military Police School we realize the importance of the combat support role of the MP.

The trend in recruiting is changing from law enforcement to the combat role. We know that "when push comes to shove" our role in rear area protection, battlefield movement control, and prisoner of war handling will be increased. Our skill qualification testing has shifted from "ticket writing" to perimeter security, patrolling, fire and maneuver, squad and platoon tactics and a lot of other "grunt" subjects.

We are proud to see this change. NCOs are enrolling in 11B correspondence courses to improve their soldierly skills. And this 33-year-old soldier-MP recently completed basic airborne training.

We, the soldiers serving as military policemen, want you infantrymen to know we are of the troops and for the troops and that we appreciate the job you are doing.

RICK DUNLAP
SFC, USA
Fort McClellan, Alabama



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From The Editor

The New Year brings with it a budget cut for INFANTRY as a result of a Department of the Army review of periodicals. The minor changes will not distract from the content; they merely require a slight adjustment of the "windage and elevation knobs" at our location. We feel we are still "on target" and will maintain a tight "shot group."

The number of departments remains the same although we must absorb a reduction of eight pages per issue. Generally, we will simply cut down by a page or two the space devoted to a particular department. Those affected are Letters to the Editor, Career Notes, Book Reviews, and Past Times. The most important aspect of our publication — your articles and features — will continue at their usual length.

We feel that INFANTRY Magazine is a vital vertebra in the backbone of today's Army. Although actions may speak louder than words, what is said and read is crucial to the dialogue that produces any successful action. Our efforts and your continued readership will sustain that dialogue.

DRK



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ARTICLES

18 ARMY AVIATION: THE COMBAT MULTIPLIER

Major Donald L. Trent

22 AIRLAND BATTLE: IMPLICATIONS FOR THE INFANTRY

Lieutenant Colonel Jerry M. Sollinger

26 BREAKOUT

Captain George C. Matoy

30 THE BATTALION EXECUTIVE OFFICER

Lieutenant Colonel Wolf D. Kutter

FORUM AND FEATURES

6 THE COMPANY

Dandridge M. Malone

7 LESSONS IN LEADERSHIP

Captain Harold E. Raugh, Jr.

9 SUSTAINING BATTLE

Lieutenant Colonel Bennet S. Jones

11 INDIRECT FIRE IN MOUT

Staff Sergeant Patrick J. Coyle

14 REGIMENTAL SYSTEM

Captain Gustav Person

15 THIRD JOB

Lieutenant Colonel Randolph T. Poore

TRAINING NOTES

34 THE BAYONET

John P. Garzone

36 INDIVIDUAL TRAINING

Captain Warren D. Wilson

38 ARTEP DEVELOPMENT

Major Richard L. St. John

DEPARTMENTS

2 COMMANDANT'S NOTE

3 INFANTRY NEWS

39 ENLISTED CAREER NOTES

42 OFFICERS CAREER NOTES

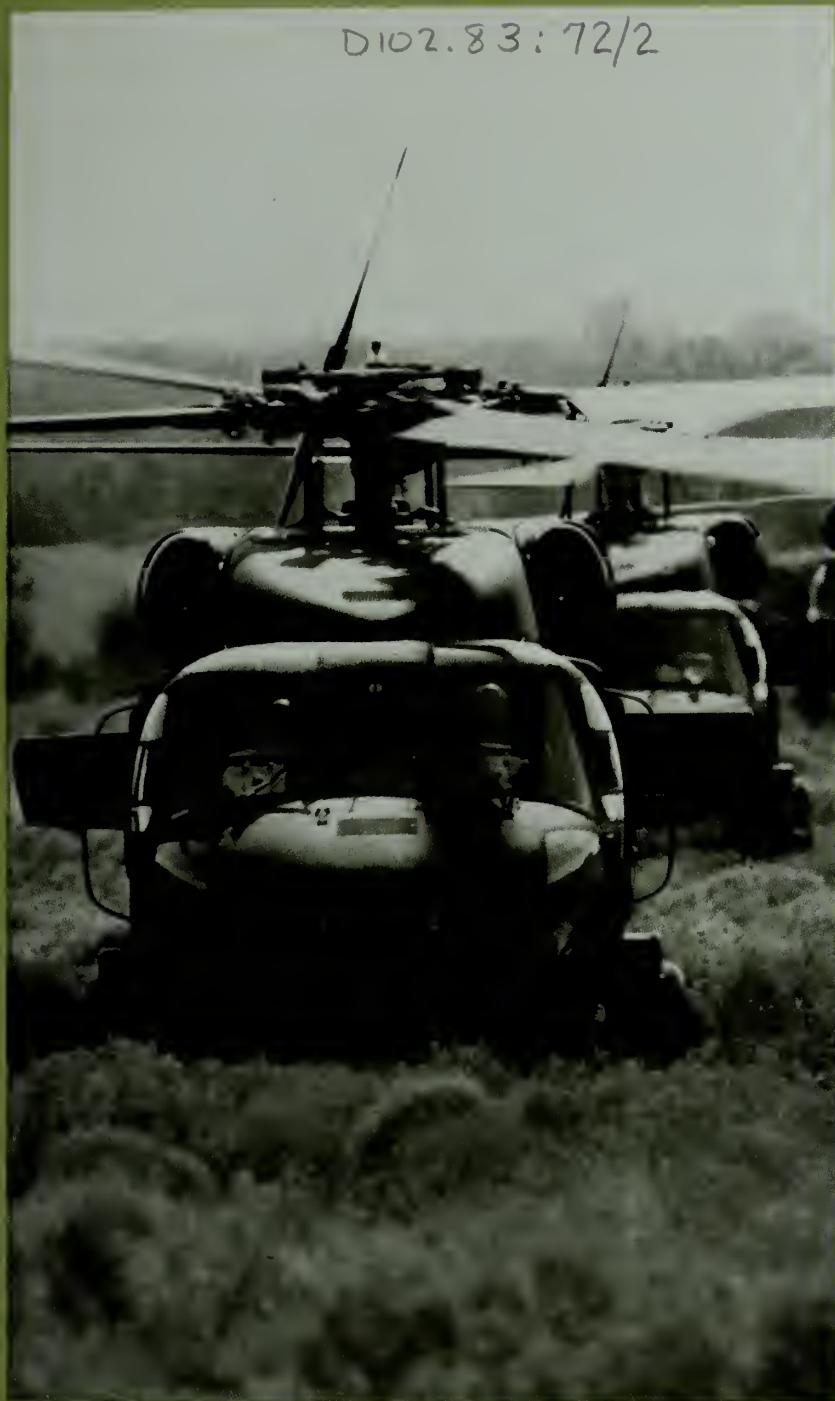
45 BOOK REVIEWS

49 LETTERS

FRONT COVER

Army Aviation gives a combined arms commander a highly flexible and potent combat multiplier.

USAIS



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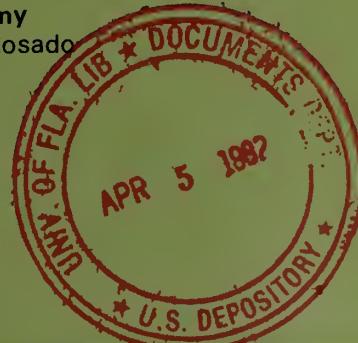
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

BLACK HAWK IMPROVEMENTS

The Infantry School, in concert with the U.S. Army Aviation Center, is currently in the process of developing a "block improvement program" for the Black Hawk helicopter. This improvement program was begun as an infantry initiative by the combat developer in coordination with the materiel development community to improve the helicopter's deployability and survivability and concomitantly to keep pace with the combined arms requirements of the 1990s.

The first UH-60A Black Hawk was delivered to the Army in 1978. Since then, more than 200 have been delivered to various CONUS divisions and installations, and this fleet has accumulated more than 58,000 operational flying hours. The Army's experience with Black Hawks includes operations in the Egyptian desert, the Panamanian jungles, and the Alaskan arctic environment. By this summer, units in USAREUR will be using it as well.

As a result of this experience, the Army is now able to forecast the improvements that are needed in the Black Hawk to provide the Army with a capability for worldwide operations on the battlefield of the future. Some of these improvements include how to increase its lift so that it can move the High Mobility Multipurpose Wheeled Vehicle (HMMWV) anywhere in the world. Additionally, the Black Hawk's ability to survive against more advanced threat weapons must be updated; at the same time, its avionics package must also be updated with a new generation of equipment. This package includes improving the accuracy of the helicopter's naviga-

tion capability, since we are now required to operate in very remote areas of the world.

The interior space of the airframe must also be reconfigured to give the infantry an ability to carry its future weapon systems and equipment. Additionally, the redesign of the interior should give medical personnel more space for treating patients during medical evacuation missions.

Finally, externally carried fuel tanks must be included in the improvements so the Black Hawk can self-deploy across the longest route of the Atlantic Ocean to Europe.

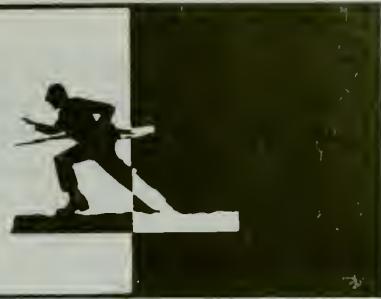
In addition to these considerations, the Army is looking for innovations such as a two-hook suspension system for external loads. This would permit a vehicle such as a TOW-mounted jeep to be "snugged-up" close to the belly of the Black Hawk, which would allow the vehicle to be flown at very low levels and at high speeds without the oscillation that normally prohibits operational flight at these altitudes.

The Army plans to involve the Navy, Marines, and Air Force in this development program, because each has expressed an interest in the improved version.

Under the Army's proposal, one-half of the future fleet will be produced in the improved version, with plans to retrofit the earlier models later. The projected delivery date for the first improved Black Hawk is some time in 1984 or 1985.

These improvements will help make the 1980s the decade of progress for the combined arms team!

INFANTRY NEWS



THE ENLISTED TRAINING program that is being developed for Bradley infantry fighting vehicle (BIFV) soldiers provides for both progressive and crossover training.

Progression training refers to the transfer of hardware (system-oriented) and software (leadership-oriented) skills that must be mastered at successive skill levels.

Crossover training is needed to provide a transfer of skills in which 11B20 through 11B40 soldiers can be trained and qualified in the 11M MOS at their skill levels.

Once they are qualified in MOS 11M, noncommissioned officers will continue to be assigned to BIFV units through Skill Level 4. Modified NCOES courses will continue to emphasize leadership training, and specific BIFV courses will not replace the courses now provided under the NCOES program.

Entry level soldiers will receive common skills training during the first 12 weeks of one station unit training (OSUT), and will graduate as 11B infantrymen. Certain selected soldiers will then be given an additional three weeks of training in a special fighting vehicle infantryman course. These additional weeks of training are needed because of the number of critical tasks in which MOS 11M soldiers must be trained. These soldiers will also be trained in BIFV maintenance and driving as well as in the basic operation of the turret and its weapon systems.

Of every nine soldiers who will be trained in MOS 11M, one will also be trained during his OSUT as a gunner for a medium antitank weapon, and will be awarded the C2 ASI when he successfully completes the training.

Since all Skill Level 2 BIFV soldiers will be trained to be qualified gunners, and to insure that all BIFV gun-

nery training is standardized, the Infantry School has proposed that this training be held at only two locations — at Fort Benning and at the Seventh Army Training Command (7ATC) in Europe. Thus, mechanized infantry units in the United States would send their soldiers to Fort Benning to receive this Skill Level 2 training, while units in Europe would send their soldiers to 7ATC.

The gunner's course will not duplicate the training now being given in the Primary Noncommissioned Officer Course (PNCOC). Because the latter is primarily a leadership course, 11M20 soldiers will have to attend both courses. The BIFV gunner's course will be four weeks in length.

At Skill Level 3, progression training will be taken care of through the NCOES program, although certain specific training will be needed for the 11M30 soldiers who will be assigned to BIFV units. These soldiers will have to attend the BIFV commander's course — six weeks in length — at Fort Benning to qualify in the skills they will need to perform effectively as BIFV commanders and trainers. The first such course is scheduled to begin in February 1983. All 11M30 soldiers will also attend the Basic Noncommissioned Officer Course (BNCOC).

Those 11M40 soldiers who will go to BIFV units will receive their crossover training through the BIFV commander's course and their progression training through the Advanced Noncommissioned Officer Course (ANCOC). BIFV training will eventually replace M113 training in the ANCOCs.

Skill Level 5 infantry soldiers whose backgrounds have been in MOSs other than 11M will also attend the BIFV commander's course at Fort Benning. There is no course within

the NCOES program into which specific training at this skill level can be incorporated.

Officers (lieutenant through lieutenant colonels) assigned to BIFV battalions will also attend the BIFV commander's course. Their periods of instruction will be tailored to fit their skill levels, duty positions, and specific needs. Certain common subjects will be given to all the officers. Eventually, BIFV training will become part of the core curriculum for the officer basic and advanced courses. BIFV training in the Infantry Pre-Command Course will be made a course elective at the appropriate time.

In December 1981, IOAC students received a two-hour course on BIFV doctrine and tactics. During July 1982, an additional 16 hours of instruction on Abrams/Bradley offensive and defensive tactics will become part of the IOAC curriculum. Beginning in March 1983, BIFV doctrine and tactics will be taught in the BIFV commander's course.

UNITED STATES ARMY RESERVE units that have training affiliations with Active Army units now may wear the shoulder sleeve insignia of the Active Army units, but local approval for wear of the insignia is subject to a mutual agreement between the Reserve unit's major U.S. Army Reserve Command and the Active Army unit commander.

The new policy is included in an interim change to AR 670-1, which was published in the Fall of 1981.

Before this action was taken, only Army National Guard units were permitted to wear the patches of their affiliated Active Army units.

4 THE RATTLER ANTIARMOR SYSTEM, which is being considered as a replacement for the Dragon, is the subject of a study now being conducted at the Infantry School.

The Rattler can be deployed and manned by a single soldier. It is expected to be highly effective against all known armor systems in both day and night engagements and against low-flying helicopters and fortified point targets under almost any battlefield condition. Its low launch smoke and noise levels will improve an infantryman's effectiveness when he has to fight from an enclosure or a built-up urban area position.

The weapon system will consist of a round (a missile or projectile in a launch tube) and a reusable target acquisition and control device, which can be disconnected from a spent round and attached quickly to a new round to engage successive targets.

Several new developments are available for use with the Rattler:

The Laser Beamrider uses a projected laser beam to guide the missile either to attack a target head on or, using sensors to detect the target, to cause the warhead to fire downward onto it to kill it from the top.

The Tank Breaker uses a shaped trajectory to attack a target from the top. A fire-and-forget system, it uses a seeker on the missile to home in on an armored target. In a somewhat similar system, fiber optic links could be used as a guidance system to relay an image of the target from the seeker on the missile to a ground-based guidance computer and display unit where a gunner, viewing the target image, could make any needed corrections.

The STAFF system (Smart Target Actuate Fire-and-Forget) is similar to the old 90mm recoilless rifle, but the projectile flies over a tank and fires down through the tank's thinner top armor, using sensors to detect the tank's presence.

The Rattler study is to be completed some time in April 1982.

ON THE NEW battle dress uniform (BDU), a "pea green" look results when the sleeves of the jacket are rolled up, because the wrong side of the fabric shows.

Here is a solution:

Step 1. Pull the cuff of the sleeve all the way up to the armpit so that the sleeve is folded over on itself with the inside showing.

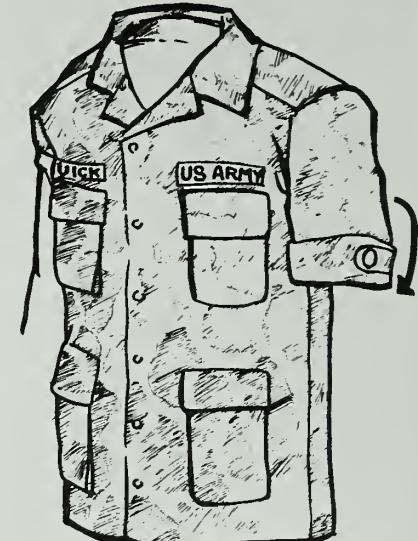


Step 2. Make two folds upward toward the armpit.



Step 3. Fold the cuff down over the folds you just made. The buttons and cuff flap should be showing.

This presents a neat cuff with the camouflage pattern covering the rolled-up sleeve.



There are two advantages to this system (in addition to appearance). It allows you to unroll the sleeve quickly by simply pulling down on the cuff — a distinct advantage in a MOPP situation, for example. This method also keeps the camouflage pattern exposed at all times. (*Idea and note prepared by Captain Gregory J. Premo, Command, Tactics, and Doctrine Department, U.S. Army Infantry School.*)

THE PROTOTYPE High Mobility/Multipurpose Wheeled Vehicles (HMMWV) that are being built by three contractors will be tested during the five-month period between 1 May 1982 and 12 September 1982. (See INfantry, November-December 1981, page 5.) The program calls for both Developmental Testing (DT II) and Operational Testing (OT II) to be conducted concurrently.

The purpose of the test program is to provide data and an associated analysis of the data concerning the operational effectiveness and the suitability of the HMMWV to the Department of the Army In Process Review and the Marine Corps System Acquisition Review Council. The analysis of the collected data will assist in the selection of a prime contractor for the system and will also be used to support the production decision.

The tests will be done using 33 HM-

MWVs, 11 provided by each contractor. The 11 vehicles from each contractor will be configured as six TOW and five utility vehicles.

The OT II program will be conducted by the Army's Operational Test and Evaluation Agency at Fort Campbell, Kentucky, using soldiers from the 101st Airborne Division (Air Assault), and by the Marine Corps' Operational Test and Evaluation Agency at Little Creek, Virginia, using Marines from various units.

The DT II program will be conducted by the Army's Test and Evaluation Command at Aberdeen Proving Ground, Maryland, and at Yuma Proving Ground, Arizona.

A Physical Teardown and Logistics Demonstration will be conducted by the Army's Tank-Automotive Command, Detroit.

Further testing of the HMMWV will be necessary later, because only two configuration kits (TOW and utility) will be tested during DT/OT II. The Infantry School has been tasked by TRADOC to be the proponent agency for this additional testing, which will start during Fiscal Year 1983.

THE INFANTRY OFFICER ADVANCED COURSE writing program has been revised. Group research projects have been added. This change highlights the importance of individual written expression, which is so vital to solid staff work.

During the second week of the course, each IOAC student takes a diagnostic test to measure his basic writing ability. The test results are then used to identify officers who need remedial training. For those who do, a 10-week remedial program has been established; it combines three classroom and two homework hours per week.

The first writing requirement, a 1,000-word philosophy of leadership paper, is graded for composition but is not recorded as part of a student's overall grade. This is followed by a history research project of 100 to 3,500 words in length; this paper

must be completed by the tenth week of the course.

The final project is a staff study that must be presented both orally and in written form.

All projects are graded and carry academic weight. A student who receives a "No Go" on any written requirement will not be eligible for the Commandant's List.

THE INFANTRY SCHOOL's Director of Combat Developments has established a battle simulation center at the School. An integral part of the center is the BATTLE model, which is a time-preserving, Monte Carlo, computer-assisted manual war game.

The center's goal is to provide training in the tactics that are outlined in Field Manual 100-5. The center also analyzes the adequacy of both ammunition supplies and battle positions, and teaches or reinforces an appreciation for the effective use of terrain, weapon capabilities, smoke effects, and other battlefield considerations.

The materials required for the program include terrain boards that depict specific geographic areas. Currently, the center is using a European setting laid out on a board that is 16 feet square. The board's plywood sections are layered with polystyrene for contour purposes. The horizontal scale is 1 inch to 50 meters, and the vertical plane is 1 inch to 40 meters of elevation.

The weapon miniatures, scaled to 1:300, have distinctive blue and red colorings and are numbered with a four-digit code that enables the computer to monitor their employment during the simulated engagements.

Colored pins are used to identify squads, teams, and indirect fire aim points, while minefields are represented in a uniform density with a total of twelve 50-meter crossing columns possible. Four crossing modes are also provided — fast, slow, opened, or buttoned up.

Finally, a WANG 2200 mini-computer system is used with the

BATTLE model. Its features include a central processing unit, a dual disk drive, a CRT console/keyboard, and a printer. A mark-sense card reader can be incorporated to speed up the play of a game. The computer can be used to store or retrieve information and to analyze the effects of the weapons.

The terrain board provides environmental data and possible tactical deployment information to the players; who make all of the tactical decisions. Play begins when information describing a tactical decision is given to the computer. The WANG system then schedules, executes, and evaluates the resultant events.

The model allows for the mounting and dismounting of elements to include ammunition resupply from supply points. It also monitors each force's status of weapon effectiveness and damage assessment. An after action readout gives casualty and logistical information.

The principal value of the model is its ability to "see" the battlefield as the action unfolds. It allows for the introduction of new tactics with reliable feedback as to their probable success. The system can "freeze" a battle at a particular point to focus on smaller tactical actions and on the effects those actions might have on the actions of the larger units.

Thus far, some of the lessons that have been learned have reinforced previous observations battlefield analysts have made. Thus, smoke can drastically influence the course of combat actions. Key weapon systems such as the TOW are wasted if they are not positioned properly and if they cannot shift to other positions quickly. Prepositioned supplies of ammunition at the company level are necessary and a continuous resupply of ammunition must be planned for at all levels. Finally, enemy counter-fire can demand the immediate relocation of friendly weapons.

Several features, such as close air support, attack helicopters, counter-battery fires, and nuclear and chemical weapons, that are not now in the model may be added in the future.

FORUM & FEATURES



THE COMPANY

DANDRIDGE M. MALONE

What is this thing we soldiers call *The Company*? It is often called a unit. And if you'll look that word up, you'll find that a unit is a one, a whole composed of parts put together, a single thing.

Now picture this "thing" on the battlefield. It is there to fight. Its sole purpose in life is to destroy enemy soldiers and to take and hold ground. It was designed that way.

It is the result of countless centuries of adjusting and adapting to the demands of thousands of battles in each of which only the fittest survived. And that thing there on the battlefield is the result of all those lessons learned, back across all those centuries. It is there on the battlefield to fight. Its standard is simple: SURVIVE. And on the battlefield, that means only one thing — WIN.

This thing can move across country, by itself, at three miles an hour. When it moves, it stretches out, like a snake, in a line a quarter of a mile long. When it rests, it curls up, facing outward, ready to fight, in a circle about 350 meters across. If it rests for very long, it begins to disappear into the earth. On the battlefield, when it's fighting, it eats about 2,000 cans

of C-rations and drinks about 500 gallons of water in a day. And it never sleeps.

When this thing attacks, its destructive power is awesome. It can come from any direction, day or night. It can hit head-on, but, usually, it won't do that. It will, instead,



send out pieces of itself in the night to sense out the weak and unprotected places, and then, just at the edge of dawn, it will strike.

It kills mostly by firing steel projectiles into the vital organs and critical

parts of its opponents. In a day of sustained combat, it can deliver almost 30,000 of these projectiles, of all shapes and sizes. Many of these projectiles explode and shatter on contact, each creating a thousand more fragments of steel that search for those vital organs.

Very seldom does this thing fight by itself. In battle, it calls its kin — other "things" that look just like it, and others that move at high speeds in steel machines, and some that fly, and some that just stand back and shoot. All of them can deliver steel into vital organs. This thing is, for certain, bad.

This thing, like you, is alive. Like you, it has muscles, called soldiers. Like you, it has a brain, called the company command post. And like you, it has, linked to that brain, a nervous system that carries the information that controls and coordinates the muscles; this is called the leadership of the unit — the captain, the lieutenant, the sergeants — linked together into a chain. How well this thing fights, and how well it can deliver steel, depends on its muscles and its nerves — and on whether both function as they are supposed to.

And, finally and mostly, it depends on how well and how much the muscles and nerves have practiced together.

In the least complex and most humble of all the kinds of fighting companies in our Army today, there are 169 men. For each of these men, there are 66 items of clothing and equipment that belong to him. There are 20 more items of clothing and equipment that the company gives to each man. And the company itself has 866 more major items of equipment and weapons that the 169 men use when the whole thing fights. That's a hell of a lot of items. And most of these items that belong to the company serve one purpose — delivering steel.

Now, if the thing is to do what it's

supposed to do on the battlefield — fight and win — then it needs to know how to use all of those weapons and items of equipment efficiently and effectively. How well it does this depends greatly on how much skill the unit has. If the unit is fully trained and ready to fight, it knows about 1,500 different kinds of individual skills. And it can combine these individual skills into 500 more packages of skill that are used by the company's squads and platoons, and by the company itself. That's 2,000 different skills. Soldiers and teams use all these skills to put all those weapons and equipment to work, to fight, to win.

All these numbers tell you how complicated that thing is on the in-

side, and why it is so deadly. And it is you, the leaders of the unit, who organize and coordinate the whole, complex, deadly thing that we soldiers call *The Company*.

DANDRIDGE M. MALONE, a retired Infantry Colonel, is a prolific writer, having published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools including the Armed Forces Staff College and the U.S. Army War College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

Lessons in Leadership



CAPTAIN HAROLD E. RAUGH, JR.

The greatest challenge that faces today's company grade Infantry officers is that of molding their platoons and companies into cohesive, combat-ready organizations. The leadership training they receive in their pre-commissioning programs, as well as in their basic and advanced courses, does offer them a significant amount of guidance, but when they get out of the classroom they are solely responsible for putting that training into practice and improving on it.

One of the best ways an infantryman can develop his own leadership abilities and attributes is to read about and study the experiences other junior officers had in past wars.

Toward that end, I wrote to several retired senior Army officers who had served as junior officers during World War I and asked them about their leadership experiences. I believe their answers are worthy of serious consideration. Even though the techniques and weapons of warfare have changed greatly since 1918, the points these men make demonstrate clearly that the basic military element of our Army — the individual soldier — remains the same. He will be successful, but only if he is well led.

For example, Major General William O. Reeder, United States Military Academy, 1917, served in France during World War I, but by

the time his regiment was equipped for battle, the Armistice had been signed. He writes:

I venture to say that the key to success is to have the men you lead confident of you. Of course, you must know your stuff but there is something else that wiser men than I have attempted to describe and have failed. One thing I'm certain of is that you mustn't look over your shoulder to see how you are doing.

Also a 1917 graduate of West Point, Colonel Clyde H. Morgan was promoted to first lieutenant soon after graduation and within a year

was acting commander of an artillery battalion. Colonel Morgan believes that the fundamentals of good leadership are best spelled out in the West Point motto of DUTY, HONOR, COUNTRY:

Supplementing that is the doctrine we received upon graduation to devote first care for your animals, followed by attention to your men and finally your personal comfort. Now that equitation is removed from the Army I would suggest replacing the animals with care of the weapons ... As you climb the ladder of promotion and success you will encounter many problems, and as they occur never sell yourself short. Have confidence in your own ability knowing the solid groundwork from which you started.

Colonel Morgan also says:

Upon landing (in France, in May 1918) we had to march four miles to the so-called rest camp. With a classmate captaining another battery, we commandeered a truck and with our mess sergeant and a cook each we hastened to the camp, secured rations, and had a warm meal awaiting our men when they arrived.

This simple example, Colonel Morgan believes, earned him the confidence and support of his men.

Colonel Thomas H. Monroe, who served as a major in the 6th Infantry Division in World War I, offers these basic tenets of leadership:

- Know your subject better than those you are teaching or commanding.
- Remember, you can learn from those you command.
- Don't play favorites; be consistent in dealing with troops.
- Never vacillate: that is, strict one day, easy the next. (Be tough but fair).
- Be loyal, both up and down. Remember, the men look to you for support and protection.

• Don't ask someone to do something you are not willing to do yourself.

• Don't use a court-martial as an instrument of command. A good commander rarely need resort to a court-martial.

• Keep a sense of humor.

Colonel A. M. Weyand, as a captain, commanded the 2d Battalion, 34th Infantry Regiment, 7th Infantry in combat in World War I. He was one of many young officers who were promoted rapidly to meet the Army's wartime needs. Of those advanced promotions, he says:

Considering my class, 1916, we were second lieutenants only two weeks and were permanent captains in under a year. As I recall, we were all majors, except a few who were temporary lieutenant colonels, in under two and a half years.

An important facet of leadership, according to Colonel Weyand, is physical courage and the effect a leader's demonstrated physical courage has on his soldiers:

No commander, no matter how small the force, should forget the 'grandstand,' as no actor or professional athlete has as critical an audience as the commander has with him. When it was noised about that the Lieutenant-Colonel was on a ridge and had been fired upon at close range, the effect on the men was apparent.

Brigadier General Willis R. Slaughter, who commanded Company B, 23d Infantry in World War I, believes in the importance of morale:

From the smallest unit to the largest, it is essential to have esprit de corps, or good morale. It is emphasized in a Division or the (USMA) Corps of Cadets, but it is just as essential in the squad and platoon. For the leader, I think it boils down for him to do what he thinks is correct and hope for the best.

General Mark W. Clark served in World War I with the 11th Infantry Regiment, 5th Infantry Division, in France where he was wounded in action. He has written extensively on leadership and believes that the following characteristics are the fundamentals of leadership:

• Confidence. If a leader does not believe in himself, no one else will.

• Energy. A leader must be willing to do everything he asks of his followers — and more. He must be able to work harder, concentrate longer, face the extra danger, carry the extra burden, go the extra mile.

• Timing. This is a combination of alertness, imagination, and foresight.

• Clarity. A leader must be able to reason logically, weigh alternatives, make decisions — and convey his thoughts lucidly.

• Tenacity. Courage, it has been said, is the capacity to hang on five minutes longer. The leader not only must have this ability himself, he must also inspire it in others.

• Boldness. This strong and virile characteristic is akin to courage, but more dynamic. It reveals itself in a willingness to take chances, a readiness to experiment, a soaring optimism that rejects and despises the thought of failure.

• Concern. Experience has taught me that men will never follow anyone unless they feel that he really cares about them and their problems.

• Morality. A stern code of ethics, a strong sense of personal morality, "obedience to the unenforceable" — these are qualities a leader must have at the core of his being.

• Faith. Above and beyond all, a leader must believe in his people as well as in the goal toward which he is leading them.

General Clark emphasizes the need for a leader to take care of his men. He remembers telling his son, when the latter graduated from West Point in 1945, "that when he became a platoon or company commander, to take a deep interest in the personal problems of his men. Many of them have

little problems that worry them sick, having to do with families back home, etc., and the commander can usually relieve his mind."

It is apparent from these various comments that there is no set equation or magic formula that can turn a soldier into a successful leader. But an infantry officer who wants to be a leader has an obligation to learn as much as he can about the many qualities that are a part of leadership; he will be entrusted with the welfare of an invaluable and irreplaceable resource — the American soldier. And studying the leadership experiences of others, both good and bad, is one way for him to learn how to succeed at it.

In 1918, Major C. A. Bach, a member of the 7th Cavalry, addressing a group of officers at Fort Sheridan, said:

When you join your organization you will find there a willing body of men who ask from you nothing more than the qualities that will command their respect, their loyalty, and their obedience.

They are perfectly ready and eager to follow you so long as you can convince them that you have those

qualities. When the time comes that they are satisfied you do not possess them you might as well kiss yourself good-bye. Your usefulness in that organization is at an end.

That's what leadership is all about. No one has ever said it any better.



CAPTAIN HAROLD E. RAUGH, JR., a 1979 ROTC graduate of the University of Wisconsin, Oshkosh, is now attending the Infantry Officer Advanced Course. He has held several positions with the Berlin Brigade and, while in Germany, attended the German Ranger School, which he described in an earlier article in INFANTRY (January-February 1981).

Sustaining Battle



LIEUTENANT COLONEL BENNET S. JONES

In recent years, the United States Army has developed new tactical doctrine to meet the challenges of the 1980s, particularly in a European environment. At first, such concepts as "come as you are," "first battle," and the "ten-day war" were in vogue. Some of these new concepts arose not because they were tactically sound but because the Army did not have the forces and material to fight a major war using its past battlefield doctrine.

In fact, it has only been in the past

year or so that the Army has become comfortable with its new doctrine because many of the questions that doctrine raised have been answered by units on the ground while they were undergoing opposing forces exercises. Today, therefore, sustainability has become one of the foremost subjects for conjecture, since most U.S. military professionals now feel that they can fight and win the next battle if the necessary resources are made available in the right amount and at the right time.

Unfortunately, while the Army may have discovered the effectiveness of rapid offensive actions directed at critical locations and decision points on a battlefield, it does not seem to have done as well with such sustainment concepts as forward area maintenance, resupply, and battlefield evacuation. Sustainment on a modern battlefield simply cannot be tied to the Army's present complex administrative and logistics systems, because it takes an inordinate amount of a commander's time to purge,

reconcile, and fine tune these systems.

It is easy enough, for example, to find a logistician who will gladly expound on such subjects as CONUS-based support concepts and the need for supply management information. It is not as easy to find one who can teach a support platoon leader in a mechanized infantry battalion how to get a tanker and pump unit (driven by a private first class who is without a radio and map) from a field trains location to an improved TOW vehicle on a forward battle position.

Somehow, then, the Army must find a way to lift the burden of peacetime administrative and logistics demands from the backs of its company and battalion commanders so that they can focus their energies instead on molding combat ready fighting units. It must also find the answers to its sustainment problems so that it can put beans, bullets, and petroleum products into the mouths, weapons, and vehicles of its soldiers when they need them. The Army will not be able to sustain a battle in a fluid environment such as it expects in the next major war if it does not identify its sustainment problems and develop practical solutions to them.

REALITY

Several of the Army's how-to-fight manuals — notably FM 71-100, Armored and Mechanized Division Operations, and FM 100-5, Operations — do discuss the organization for service support operations and identify the principal participants. But the charts and diagrams in them are simplistic. They include a lot of graphics with sweeping arrows that are supposed to explain how to arm, fuel, fix, and man battlefield weapon systems. The catch-words, phrases, and italicized statements that fill the text of these manuals may appear profound at first, but when they are looked at more closely they merely announce the obvious. For example, this is one of the more astute observations: "The quicker a unit can load

up, the faster it can deploy."

The Army's sustainability doctrine, therefore, appears to be focused more on "who should" rather than on "how to," and it does not seem to be based on reality. Today's mechanized infantry and armor battalions, for example, have only limited cargo carrying capabilities. And there are not enough authorized front-line ambulances to evacuate casualties to battalion aid stations, which are located much farther to the rear than they were when the Army's evacuation procedures were established in World War II. In addition, the manuals fail to address such important real-world questions as these:

- How can ammunition and repair parts resupply procedures be established to adjust to changes in a brigade's task organization?
- When a unit tows a damaged vehicle to the rear and determines that it cannot be repaired at the unit level, how does the unit's executive officer or the battalion's S4 tell a forward support element that additional maintenance teams are needed? And whose recovery vehicle should be used to tow the damaged vehicle farther to the rear when necessary for repair by "technical experts," as specified in FM 100-5?
- How can other damaged vehicles be recovered if a unit's recovery vehicle is involved in towing operations?

Despite the burdensome nature of peacetime regulations and constraints, units in Europe are trying to find ways to solve the problems associated with unit sustainability. One battalion started with its leaders questioning the adequacy of their task force's support when that support was organized into the traditional field and combat trains.

In a series of opposing force field exercises, the battalion trains were found to be less than responsive to the rapidly changing tactical situations. While the combat trains were busy being captured, for example, the field trains were busy trying to find out where the company trains had gone. Eventually, the field trains, normally located near the brigade

trains, were pared down to the absolutely essential elements and these were dispersed throughout the battalion's area. They were also placed under the control of a battalion logistics operations center (LOC). The LOC itself was located well forward, while a network of logistical release points (LRPs) was established near the initial and subsequent battle positions designated in the battalion's operations plan. An emergency resupply package (Class III and V) tailored specifically for the units occupying the battle positions was placed at each LRP.

As the tactical situation developed, the LOC directed recovery vehicles, additional ammunition and petroleum supplies, ambulances, and other needed support to the appropriate LRP. Company executive officers, supply sergeants, and first sergeants never had to go farther to the rear than the supporting LRP. Battlefield casualties and damaged vehicles were evacuated by the companies to the LRPs, where either a battalion or a forward support element took over.

The LRP approach is but one way battalions in the field are trying to find answers to sustainability questions. It shows what can be done by commanders and, hopefully, it will be noticed by those charged with developing doctrine and publishing how-to-fight manuals. It might also cause those in the Army's higher echelons to consider publishing "how-to-sustain" manuals, for if the Army is to win the next battle, it will have to be able to sustain the units and soldiers who will be fighting that battle.

LIEUTENANT COLONEL BENNET S. JONES, an Infantry officer, graduated from Officer Candidate School in 1963. He served two tours in Vietnam, as an advisor and a company commander, and is a 1978 graduate of the Command and General Staff College. He now commands the 1st Battalion, 54th Infantry, 1st Armored Division.

Indirect Fire in MOUT



STAFF SERGEANT PATRICK J. COYLE

A unit that must fight in urban terrain can expect to encounter certain operational problems it will meet nowhere else. Among them are several that have to do with indirect fire support.

The close spacing of the buildings, for example, usually makes it most difficult to select, camouflage, and defend firing positions. Communications are difficult to put in and maintain. There are also magnetic influences in urban terrain that will affect compasses and aiming circles. But the basic ballistic problems involved in the employment of indirect fire may be the most serious ones.

The first and most basic of these ballistic problems is the inability of indirect fire weapons to reach a large number of targets in a city. This is caused by a combination of the angle of fall of a projectile from an indirect fire weapon and the height of the buildings. This combination leaves indirect fire deadspaces of varying size that no reasonable amount of ammunition can overcome.

Determining the size of a particular deadspace requires a simple trigonometric calculation that is based on the tangent of the angle of fall ($\cot F$) for a particular firing elevation and charge. Thus, the extent of the deadspace is obtained by multiplying the $\cot F$ by the height of the obstacle near the target in the line of flight. (The $\cot F$ is found in the supplementary data section of the applicable firing table.)

The firing elevations for the 81mm

and 107mm mortars and for the 155mm howitzer at various values of $\cot F$ are shown in Figure 1. The deadspaces for buildings of various heights are shown in Figure 2, with the calculations based on the assumption that each story is five meters tall. But simply determining the extent of a deadspace is not enough for fire planning purposes. Some targets have to be engaged regardless, and since a building cannot be moved, other methods must be used.

One way to solve this problem is either to move the firing piece or to

while the three weapons listed in Figure 1 can fire with a $\cot F$ equal to .5, both the howitzer and the 81mm mortar can fire at .3 and .1 respectively. (Even the 107mm mortar could fire with a $\cot F$ of .3 if data were developed for firing it at an elevation of 1,100 mils, which is within the physical capabilities of the weapon.) But because the 55mm howitzer normally does not fire at this high an elevation, its firing tables are sketchy, but this could be easily remedied.

Although this method of dealing with the problem comes into direct

$\cot F$	FIRING ELEVATION IN MILS		
	81mm	107mm	155mm
.1	1405		
.3	1147		1156
.5	0937	1065	1017
.7	0800	0900	0746
.9		0800	0665
1.0			0615
3.0			0226
5.0			0145
10.0			0082
15.0			0057

Figure 1. Cot F of Various Weapons.

employ another weapon at a different location. This method is best when a single tall building is on one side of a target; it is not feasible when a target is surrounded by tall buildings.

The other fairly obvious method of firing into a deadspace is to reduce the $\cot F$. As Figure 2 shows, when indirect fire weapons are fired at a $\cot F$ of .5 or less, large areas of deadspace fall within the effective bursting radius of their rounds. Too,

conflict with the Army's current doctrine of firing at the lowest elevation to avoid counterbattery radar, it becomes an acceptable risk in a MOUT environment for two reasons. First, the ground clutter of the city interferes with the accuracy of counterbattery radar. Secondly, the increased firing elevation allows the weapons to be moved closer to high-rise buildings and thus into the deadspace of the enemy's indirect fire weapons. This is

especially true of the Threat's most effective counterbattery weapons, the BM-21 multiple rocket system, which has a maximum firing elevation of

height of the structure away; and when fired at more than 535 mils it needs to be at least twice the height of the building from the structure.

HEIGHT OF BUILDING IN STORIES			
Cot F	3	5	10
.1	1.5	2.5	5.0
.3	4.5	7.5	15.0
.5	7.5	12.5	25.0
.7	10.5	17.5	35.0
.9	13.5	22.5	45.0
1.0	15.0	25.0	50.0
3.0	45.0	75.0	150.0
5.0	75.0	125.0	250.0
10.0	150.0	250.0	500.0
15.0	225.0	375.0	750.0

Figure 2. Deadspace in meters of various cot F.

about 885 mils. Also, because it is a rocket, this weapon should have a correspondingly greater cot F, which means more deadspace.

This bellying-up to a building for protection against counterbattery fire does bring up another problem: the need for a quick way of determining mask, or ground clearance (called *site* in the field artillery), for the flight of a round. But this problem is solved

(These rules are based on the properties of the 30-60-90 triangle.)

Admittedly, sometimes large deadspaces cannot be avoided, and the size of open areas in a city is fairly restricted. As deadspaces increase in size they take up a significant amount of the already limited open space and thus the target areas decrease even further.

But indirect fire weapons are called

ONE RANGE PROBABLE ERROR IN METERS			
RANGE	81mm	107mm	155mm
1000	7m	9m	7m
1500	9m	12m	7m
2000	11m	17m	7m
2500	13m	19m	7m
3000	15m	23m	8m
4000	19m	25m	8m
5000		30m	9m
7500			12m

Figure 3. One Range Probable Error at Selected Firing Data

quite easily. Instead of waiting until their weapon is set up and then measuring the minimum firing elevation that will clear a mask, indirect fire crews should remember three simple rules of thumb: When the gun is being fired at 1,070 mils or more it must be at a distance of at least half the height of the structure away from the building; when fired at more than 800 mils it should be at least the

"area weapons" in the first place because there is no way to pinpoint exactly where each of their rounds will land. Because of the many variables in the ballistic equation (such as wind speed and direction, air density and temperatures, and variations in weight of projectile and weapon wear), the best a crew can do is to define an area in which a round will probably land. This then is the

concept of the probable error — one range probable error is defined as that distance added to or subtracted from the expected point of impact that will enclose 50 percent of the rounds fired at that data (Figure 3).

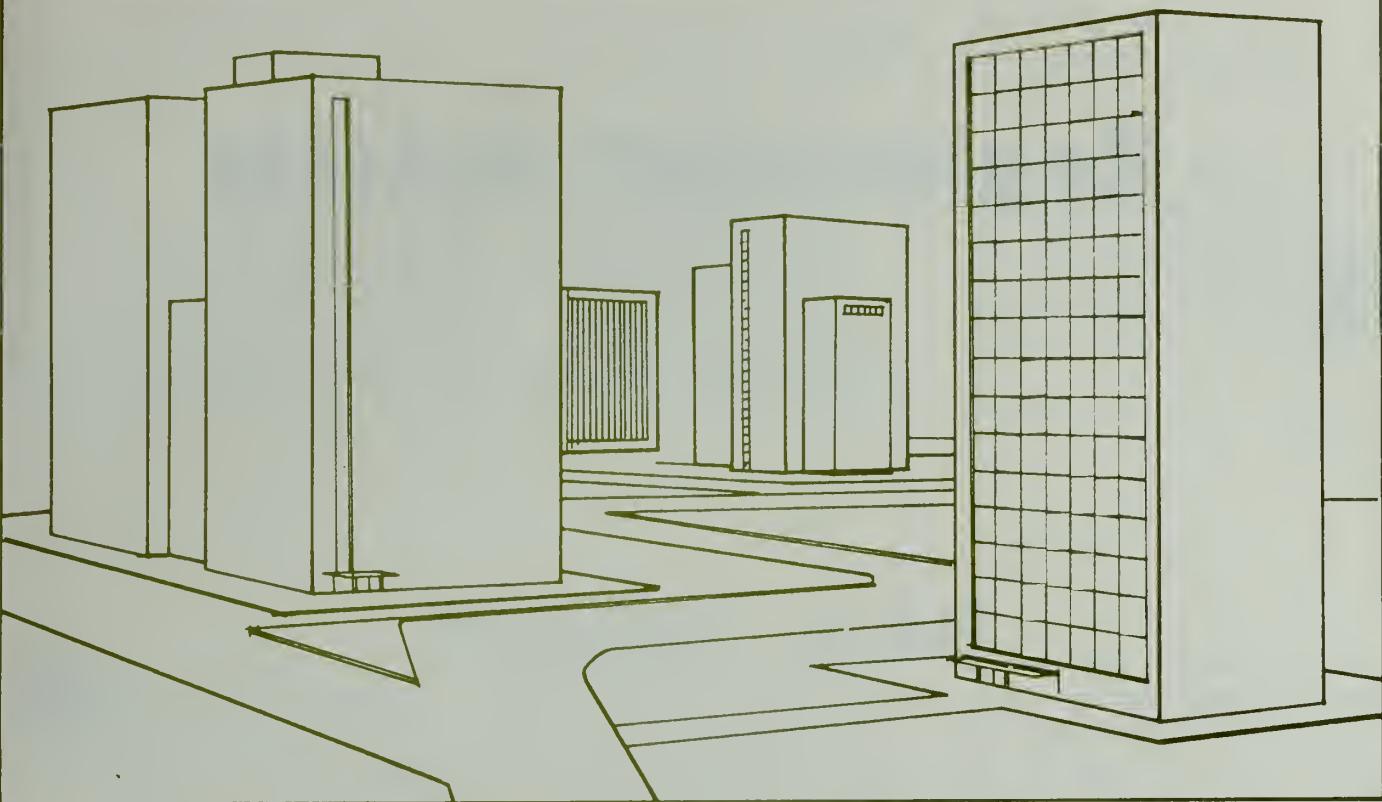
Given the combination of indirect fire deadspace, the lack of sizable open spaces in a city, and range probable error, the difficulty is clear. As the size of the deadspace increases, it quickly reduces the open space available for targeting. As the targeting area decreases, it rapidly approaches the size of the range probable error. When it decreases to just twice one probable error, a crew can expect that only 50 percent of the rounds it fires will land in a target area. And as a target area decreases in size, the percentage of rounds they can expect to land within it decreases to zero; that is, the deadspace then equals the size of the open space. This means that if they are to put the required number of rounds on a target, they must fire more rounds.

SUPPLY

Even if the Army had a perfect supply system with an unlimited number of rounds, this would cause some problems because the rounds that do not hit in the target area will still hit somewhere — half will fall long, half will fall short. Assuming that there are no friendly troops to the enemy's rear, the long rounds will do no harm and might have a detrimental effect on the enemy's plans. Unfortunately, though, the rounds that fall short of the target area will fall on or near friendly troops.

Another problem that needs to be considered is the effectiveness of indirect fire ammunition in MOUT operations, because the fuzes and the effects of the various types of munitions have been designed for conventional combat in open terrain. While no experimental data is available, certain effects can be expected when these munitions are used among buildings:

- High explosive ammunition will



produce a certain amount of secondary shrapnel when it hits on buildings, but this shrapnel will have a limited effect on even lightly armored vehicles. Also, the blast and shrapnel effect of HE ammunition that hits in rubble will be limited.

- White phosphorus and other types of smoke will be of little use. Because of the combination of unpredictable winds at street level and the total ineffectiveness of the rounds that hit on the tops of the buildings, a large number of rounds would have to be expended to establish and maintain conventional smoke screens. White phosphorus rounds could be used in an incendiary role against flammable chemical storage areas in the enemy rear area.

- Illumination rounds will be of limited use because of the canyon nature of the terrain. Direct illumination would be difficult to maintain because of the vagaries of the wind current and the shadows cast by the buildings. Illumination rounds could also be used effectively as incendiary rounds. In this respect, the 155mm canister would be better suited, because it has a greater chance of

penetrating roofs and fuel tanks.

- All improved conventional munitions (ICMs) that depend on proximity fusing suffer the same defect: premature detonation while passing over a building when the target is on the street below. Terminally guided munitions (Copperheads) will remain effective as long as they can "see" the laser signature. When this signature is hidden behind some building, these projectiles become nothing more than very expensive HE rounds. One way to decrease this problem is to fire the shell at an extremely high elevation so that it can "see" more of a street.

These various effects that restrict

the performance of indirect fire ammunition only add to the other ballistic problems encountered in urban terrain — the combination of angle of fall and height of buildings, which creates deadspace, and the combination of the limited amount of clear terrain and the range probable error of the weapons, which leads to an excessive expenditure of ammunition and to increased danger to friendly troops.

For all of these reasons, the Army must devote time and attention to the employment of its indirect fire weapons if they are to offer effective support in urban areas.



STAFF SERGEANT PATRICK J. COYLE enlisted in the Army in 1972. He has served in several assignments in Berlin, including one in a fire direction center, and he was chief computer during the Army's first MOUT ARTEP. He also previously served with the 4th Infantry Division at Fort Carson, Colorado.



Regimental System

CAPTAIN GUSTAV PERSON

There has been a great deal of discussion recently about the need to restore a sense of cohesiveness and esprit de corps to the Infantry. One proposed method of achieving this is the adoption of a modified British regimental system.

The regimental structure of the British Army is unique among the armies of the world. Begun in the 17th century, it has survived, with relatively few changes, to the present day.

Despite the changes, each regiment continues to preserve its identity within the army, even though recent amalgamations have drastically changed the individuality of certain units. Continuity, though, has been preserved at all costs, and each recruit is still offered the opportunity to serve in his county regiment alongside his friends and neighbors.

The soldier is imbued with his regiment's history and traditions, and he receives formal training in them. He knows he will serve exclusively with his own regiment and will not be arbitrarily posted to some other unit without his consent. In effect, the regiment is a family with successive generations of officers and enlisted men serving in its ranks. Strong efforts are made to maintain active veterans' associations and to foster affiliations with the cities, towns, and communities in the regiment's recruiting area.

The feeling of the regiment as a family is present at all ranks from the colonel of the regiment to the lowest private. Such comradeship and continuity are the basic ingredients of the British regimental system.

This system can be adapted for use by the U.S. Army and I believe it might offer a number of benefits.

- A primary recruiting region (regimental area) within the country could be designated for each infantry regiment in the Army. A regimental headquarters could be located at an Army post or a convenient National Guard armory, or an Army Reserve Center. At the headquarters, a regimental secretary and a small staff could handle such matters as recruiting, public relations, and other regimental business. A regimental museum there might attract recruits and favorable public attention.

- Recruiters would be encouraged to enlist soldiers into their own regiments.

- Training depots could be established at specified posts for the regiments recruiting in their vicinity. For example, all of the regiments recruiting in the northeastern United States would send their recruits to the training center at Fort Dix, New Jersey. Drill sergeants and instructors would be drawn from the parent regiments. This would instill in the new soldier a sense of belonging from

his first day of service.

- Affiliations would be established with the National Guard regiments in the regimental area. The British Army has now incorporated all its reserve battalions into its regular army order of battle. Since many of our National Guard regiments pre-date our Regular Army regiments, this may not be a wise idea here. But regimental ties would strengthen a Regular Army regiment's position in a community, especially if its soldiers were encouraged to enlist in the affiliated National Guard regiment when they were discharged.

- An Honorary Colonel for each regiment in the Army could be designated, and he would be responsible for welfare, recruiting, veterans' affairs, unit administration, and traditions. The colonel would normally be a distinguished officer or civilian who had served in the regiment at one time. In the British Army, these officers have been quite successful in promoting their regiments.

- A system of regimental veterans' associations could be formed. The British have tied their veterans and active members together by regularly published newsletters and journals that provide information to all members of the regimental family.

- Finally, once a regiment had established its regimental area, the

Army would make certain that the battalions of that regiment would be kept in being for long periods of time. The battalions would rotate throughout the world as complete units.

The above suggestions might cost money and a regimental system would require extra effort to organize and administer. In the long run, however, it would result in a more efficient and professional army with better morale. Each soldier would

feel that he had a stake in the success of his own battalion, a feeling that he

might never find as a member of a more impersonal organization.



CAPTAIN GUSTAV PERSON, a 1972 Infantry OCS graduate, is S3 Air in the 1st Battalion, 107th Infantry, New York Army National Guard. He holds a degree in history from Queens College and has completed the Infantry Officer Advanced Course.

THIRD JOB

LIEUTENANT COLONEL RANDOLPH T. POORE



The battalion S4's job is one that few officers will stand in line to get. And yet his job is an important one, probably as important as any other. Unfortunately, though, the S4 is the one most likely to be criticized when something is not where it is supposed to be when it is supposed to be there.

There is no standard description that fits every battalion S4. He may be brand new or he may have some experience. He may be overseas with a well-defined readiness mission, or he may be stateside with a deployment mission. Although he may be a former company commander, he is more likely to be in a holding pattern waiting for a command to open up.

Not many people fully understand his position and its difficulties — and that sometimes includes his battalion commander, who in most cases has never served as an S4 himself. The chief problem with this lack of

understanding is that, in most battalions, when it comes to the tactical training cycle, the S4 has to take his place in line behind the S2 and the S3. In addition, because his performance can be more easily measured than that of the other key officers in a combat battalion, he is especially vulnerable to failure and criticism.

My purpose is not to try to get sympathy for the battalion S4; neither is it to ask for relief on his behalf. My purpose is to remind everyone concerned that the S4 has what amounts to three jobs, not just the two that usually come to mind.

First, he has to see that the battalion and company commanders get the equipment they need when they need it. His second job is to see that the logistics regulations are followed and that the appropriate reports are prepared. His third job is to be ready to handle the battalion's logistics

needs in combat. And it is dangerous for him and for others to assume that doing the first two jobs will automatically prepare him to do the third. But an S4 may have trouble coming to grips with this aspect of his job for two reasons.

First, too many battalion commanders change their S4s too frequently, which does not allow an S4 time to get comfortable in the job. Secondly, an S4 is usually so tied up with his first two jobs, which are probably more pressing at the time, that the third one is usually shunted aside. But what the S4 and the other people on the battalion staff must realize is that when combat comes, those first two jobs will seem like small potatoes.

This means, of course, that the S4 must always be ready to shift suddenly from the routine of his first and second jobs into the pressing demands

of his third one. If he is not properly prepared, he will be unable to push aside his other tasks. He will be confused, and his confusion will be harmful to all those around him.

The following list of questions is offered as a starting point for the S4 in establishing a plan for executing his combat readiness responsibility. The questions are directed at the S4, and although they are not exhaustive, they should serve to stimulate his thinking. The questions assume that the battalion already has and practices a basic alert sequence that includes such items as marshalling procedures, CTA 50 shortages, advance party makeup, a method of hand-receiving property that is left behind, the preparation of hazardous cargo forms, a method of checking the serviceability of equipment, and some comprehensive loading plans.

QUESTIONS ON RESUPPLY

C Rations

- How much does a case of rations weigh?
- How many rations will each man carry?
- How many will go on organic transportation?
- When was the last time the concept was verified?

Water

- How many water purifications units (WPUs) are in your parent organization's engineer battalion (company)?
- How many can your battalion count on in combat?
- What is one WPU's capacity for purifying water? Storing water?
- What is your battalion's capacity for storing water?
- Do you have any collapsible drums for water storage, or can you get some?
- Are they serviceable?
- When was the last time you checked them?
- How many five-gallon cans does



your battalion have on hand or on order for water storage?

- When was the last time they were inventoried?
- How much water will your men require each day? In an arid climate? In the cold?

Aviation, MOGAS, and Diesel Fuel

- What, if any, is your battalion's capacity to store aviation, MOGAS, and diesel fuels?
- What does each type of fuel weigh per gallon?
- How many five-gallon fuel cans does the battalion have on hand or on order?
- How much MOGAS or diesel fuel is required for each type of vehicle per day in combat? Based on how

many hours of use per day?

- Are there any aviation missions your battalion would be likely to support?
- Do you know how to support the operation of a Forward Area Rearm/Refuel Point?

Packaged POL

- What is your plan for packaged POL deployment (including oil and bore cleaner for weapons)?
- How will you move it?

Antifreeze

- Do you have an extra load of antifreeze?
- How much will your battalion need?

- Where is it?
- How much does it weigh?

Barrier Material

- How much of what kind of barrier material will you need?
- Where can you get some quickly?
- How much can you get?
- Where can you place it in your loading plans?
- How much does it weigh?

Ammunition

- When was the battalion's basic load of ammunition last computed and justified?
- Have you included the ammunition for the new weapon systems you have received or are about to receive?
- How will you move the basic load?
- Can you even move the basic load?
- What does it weigh?
- How many vehicles will it take to move it?
- How many aircraft?
- When was the last time you moved it (without cutting corners)?

PLL

- How many vehicles and trailers will it take to move your battalion's prescribed load list?
- What augmentation of PLL will you request when alerted?
- How much of your PLL must be moved for you?

Batteries

- What is your plan for battery resupply?
- Does your parent unit have a battery package set aside for rapid deployment?

QUESTIONS ON CONTINGENCIES

- How can you obtain any or all of the following when they are needed?
- Cold weather gear.

- Extra and larger canteens.
- Goggles.
- Transformers for power conversion.
- Insect bars and repellent.
- Sunburn cream and lip balm.
- Sunglasses.
- Provisions for shade.
- Extra rope and snap links.
- Pallets for storage.
- Bolt cutters.
- Airfield matting for aircraft repair.
- Cement.
- NBC equipment, including extra filters.

- What will you sacrifice first if you cannot get all the transportation you need? What next?
- What new weapon systems will your battalion be receiving in the next year?
- What will it take to support them?
- Will you need extra PLL? Extra personnel? Different ammunition?

FINAL QUESTION

In addition to all of these, there is a final question, one of the most important: Does the battalion commander require the battalion to train with the constraints prompted by the other questions?

Obviously, not all of these questions will apply to every unit. Those that do apply will depend on a battalion's contingency plans, and the S4 should read these plans and then reread them periodically.

Once an S4 really begins to understand this third aspect of his job, he will also begin to realize that he is a logistics tactical planner — a logistics technician — as well as a logistics coordinator. At this point his toughest challenge will lie just ahead: He must share what he has learned with other members of the battalion, in particular the commander and the S3, and in the process help them to appreciate the role of logistics in tactical planning. For unless they have an understanding of the constraints imposed by logistics, the battalion will not be able to perform at its best in the critical early stages of deployment and later in combat.



LIEUTENANT COLONEL RANDOLPH T. POORE is Chief, Maintenance Division, U.S. Army, Berlin. He previously served in several maintenance and supply assignments, including one as assistant G4 of the 82d Airborne Division at Fort Bragg, North Carolina. An ROTC graduate of Washington and Lee University, he also holds a master's degree from the University of Alabama.



Major Donald L. Trent

ARMY AVIATION: the combat multiplier

Past military conflicts provide many examples of what the United States Army's evolving AirLand battle doctrine really means. The U.S. Third Army's attack across France, the Soviets' advance into Manchuria in 1945, the U.N.'s counteroffensive in Korea in 1951, and the Israelis' Sinai campaign of 1967 are particularly good examples. With one exception, all of these pitted numerically inferior against numerically superior forces. All were combined arms operations. The Third Army blitz is also a superb example of air and land forces working in concert. In fact, because of the Third Army's successes, the German high command characterized its commander, General George Patton, as "the most feared general of World War II . . . a master of doing the unexpected . . . completely unpredictable."

If U.S. commanders are to succeed on the integrated battlefield using the new AirLand battle doctrine, their enemy must perceive them, too, as "completely unpredictable." With its inherent risks, the integrated battlefield will give commanders an opportunity to recall and use

historical examples, and also to establish precedents for future action. This is the time for them to be innovative, to synchronize their efforts, to prepare. The AirLand battle doctrine gives them the impetus, the common goal, the charter for doing what they have to do. The Aviation Center has readily embraced the new doctrine and concepts, and feels that Army Aviation is ideally suited to play a major role on the integrated battlefield as a "combat multiplier."

But first, the commanders involved must have a clear understanding of the concept of the AirLand battle with its perceived battlefield, beginning with some definitions of terms:

The Integrated Battlefield. This is a generic description of the battlefield on which either combatant has employed or could employ nuclear, chemical, conventional, electronic, or directed energy weapon systems, either singly or in combination.

The Extended Battlefield. This term describes the need to use the full range of friendly capabilities, including

deep-ranging sensors and weapons, with the goal of destroying the enemy's will to fight. Enemy units not yet in contact are brought under deep attack so that they can be destroyed, disrupted, or delayed. The concept recognizes that the deep and close-in battles are inseparable and that both must be prosecuted within the commander's overall objectives.

The AirLand Battle. This term ties together the integrated and extended battlefield concepts and applies them to the battlefield envisioned in the 1980s and beyond. Its main theme is to win by early offensive actions conducted by joint air and land forces. The key to modernization as set forth in the AirLand battle concept is based on Army 86 materiel and force structure requirements.

To fight the AirLand battle, commanders must employ their ground and air forces to seize the initiative before they take on the first enemy echelons. A commander's greatest concern will be to commit his forces at the critical point at which they can influence the battle. This is presently referred to in measurements of time or distance from the "forward line of own troops" (FLOT). Once a commander has determined that critical point, he must plan in detail, coordinate precisely, execute violently, and finish rapidly.

To prepare for its role, the Army Aviation community is continuing its development and procurement of new systems, its progressive training, and its development and testing of new organizations. The Army Aviation organizations scheduled for fielding under Army 86 are the Air Cavalry Attack Brigade (ACAB) and the Corps Aviation Brigade. These units are ideally suited to the offensive nature of the evolving battle doctrine.

The ACAB, for example, is a highly potent maneuver force. It can defeat the enemy's first and second echelon forces during offensive and defensive operations; attack in any direction; conduct reconnaissance, surveillance, attack, and airmobile operations simultaneously; conduct continuous operations; and offer unity of command for all of a division's aviation assets.

NEW SYSTEMS

In addition, the following aviation systems will further improve the combined arms effort within those units.

SEMA

Special electronics mission aircraft (SEMA) will allow the commander to see the battlefield far beyond the FLOT. The better he sees the battlefield, the better he can concentrate his forces or employ economy of forces at the right time and place. The improved GUARDRAIL system (RC-12D) provides communications intercept, exploitation, and emitter locating capabilities at corps level.

The QUICK FIX IIB (EH-60) is the first true division level electronic warfare system. It can disrupt the integri-



ty of an enemy's communications networks and also provide protection against hostile radar emitters.

The QUICK LOOK (RV-1) currently provides a corps level system that conducts visual reconnaissance and monitors an enemy's radar emitters while simultaneously retransmitting that data to ground facilities for quick processing and dissemination.

The Side Looking Airborne Radar (SLAR) (OV-1D) complements QUICK LOOK at corps level with near real time radar imagery of both fixed and moving targets and infrared (IR) imagery photo reconnaissance functions.

The heliborne Standoff Target Acquisition System (SOTAS) will be mounted on an EH-60 to further round out the commander's ability to see far beyond the FLOT.

AHIP

The Army Helicopter Improvement Program (AHIP) is developing an improved scout helicopter that will be better able to fight when it works with the attack helicopter. It will provide improved battlefield reconnaissance, timely information, security, aerial observation, and target acquisition and designation systems during both day and night operations and during periods of reduced visibility.

The improvements that are now being made will include electronic countermeasures, an air-to-air missile system, and better vision equipment. A mast-mounted



sight (MMS) will provide standoff target acquisition, while laser designation systems will permit them to remain masked during reconnaissance, surveillance, artillery observation, and target acquisition missions. The MMS will also give the helicopter visual and optical equipment that is more compatible with that of the AH-1S and AH-64 helicopters.

AH-1S

The AH-1S, a fully modernized Cobra helicopter, which is now being fielded, will be an integral part of the Army's attack helicopter force through the year 2000.



The AH-1S can carry eight tube-launched, optically tracked, wire-guided (TOW) missiles, 320 rounds of 20mm ammunition, and 14 70mm (2.75-inch FFAR) rockets. In an alternate mission configuration, the aircraft can carry up to 76 70mm rockets.

When it is fielded, the Forward Looking Infrared Augmented Cobra TOW Sight (FACTS) will give the AH-1S attack fleet an improved target engagement capability during night and reduced visibility operations.

AH-64

The AH-64 advanced attack helicopter will improve the Army's ability to influence the battle on a broad front. It can be armed with as many as 16 Hellfire missiles in addition to its rapid-firing, armor-piercing 30mm cannon, which has a maximum effective range of three kilometers. Alternate mission configurations for the AH-64 include armament loads of up to 76 70mm rockets or a combination of Hellfire, 70mm rockets, and 30mm rounds.

Reliability, availability, and maintainability have been built into the AH-64, and it has been designed so that it is nearly invulnerable to 12.7mm rounds. The Pilot's Night Vision System (PNVS) improves the crew's ability to spot an enemy force during periods of limited visibility. In concert with the Target Acquisition and Designation Systems (TADS), the PNVS will enable the AH-64 to



fight in conjunction with the Abrams tank and the Bradley fighting vehicle around the clock.

UH-60

The UH-60 Blackhawk, the Army's new firstline utility assault helicopter, will be used chiefly in the main battle area as a troop-carrying and logistics aircraft. A com-



mander can use the UH-60 to conduct air assaults and raids. He can also use it to move antiarmor teams through the battle area, to deploy rear area security forces to counter enemy airborne and airmobile operations, and to resupply his units.

CH-47D

The CH-47D Chinook modernization program provides a helicopter that will meet the Army's medium lift transport needs of the 1980s and 1990s. It will play a vital role on the modern battlefield, particularly in airlifting maneuver forces to widely dispersed positions to prevent them from becoming potential nuclear or chemical targets.

TRAINING EFFORT

As for training, the Aviation School is working on the



premise that our forces must be prepared to perform 24 hours a day on the integrated battlefield. The School is conducting realistic training with our current systems while awaiting the new and improved systems that are on the way.

The training at Fort Rucker is now focused more than ever on stressing the combined arms effort as well as on producing technically sound aviators. The basic manuals on employment are being updated to conform to the emerging AirLand battle doctrine; to insure a smooth transition into the future, all systems, concepts, and organizations are being tested against all kinds of scenarios.

Finally, the Aviation Center continues to work closely with the other TRADOC schools and centers to insure that everyone fully understands the role of Army Aviation as a full-fledged member of the combined arms team.

Army Aviation gives a combined arms commander a highly flexible and potent combat multiplier. As an authentic combined arms element, Army Aviation sup-

ports the eight TRADOC mission areas set forth in TRADOC Pamphlet 525-5. The Aviation School is writing new doctrine and testing new concepts. The proof of its success, though, will eventually come from the field. Now is the time for the field to prepare for and use Army Aviation as the combat multiplier it is intended to be.



MAJOR DONALD L. TRENT is assigned to the Directorate of Combat Developments at the U.S. Army Aviation Center, Fort Rucker, Alabama. He is a graduate of St. Martin's College and of the Air Force Staff College. He served in air cavalry units in Vietnam and has held several battalion and brigade positions.

AIRLAND BATTLE



Implications for the Infantry

LIEUTENANT COLONEL JERRY M. SOLLINGER

Any review of the military literature of the past two decades or so reveals not only that the Army constantly finds itself standing at the threshold of one thing or another, but that these thresholds always seem to portend major change. Many of these changes, fortunately, are stillborn. Thus, the announcement of reaching another threshold that heralds still more ominous change tends to provoke skepticism, if not downright cynicism. Yet the publication of TRADOC Pamphlet 525-5, *The AirLand Battle and Corps 86*, and the approval of the final draft of a new Field Manual 100-5 justify such an announcement, for the doctrinal shifts the two publications embody have major implications for those who will fight the next war.

To be sure, the publication of the previous version of FM 100-5 (July 1976) created a considerable stir, and the pangs attendant to its birth have not totally subsided. But that excitement stemmed as much as anything else from the startling and lethal lessons of the Israeli experience and the personal magnetism of the author. The Army really did not have to do anything different; it just had to do things better and faster.

The new doctrine, though, demands some significant changes. And these changes fall on no one more heavily than on the infantry commanders and operations officers at the brigade and battalion levels. To enact this doctrine, they will need to reconsider how we fight.

The basic principles of the AirLand battle are few and simply stated:

- Deep attack is essential.
- Deep attack and the close-in fight are inseparable.
- Planning for nuclear and chemical fires must be continuous.

Both of the new publications offer compelling logic for each principle. The main criticisms of the previous doctrine held that it sought, at best, a draw, and called for engaging an enemy's strengths rather than his weaknesses. Numerous studies and wargames showed that regardless of how the attrition ratios fared, the end result remained the same — the United States Army lost.

The new doctrine tries to avoid those problems by attacking an enemy force at each level (at least for first echelon armies). Such attacks offer numerous benefits: They slow the arrival of follow-on echelons, exact casualties on combat and support forces, and create the opportunity for offensive action at the forward line of own troops (FLOT). Thus, the deep and the close-in battle cannot be separated. The allocation of resources, the assignment of missions, the logistical support — in short, everything connected with fighting battles — must all take place with an eye to the total battle. They cannot be viewed as separate fights. This point is an important one. It fundamentally shifts the focus of the battle and dramatically affects the manner of fighting it at each level.

The third principle of the AirLand battle attempts to address a problem that has confronted the Army since President Kennedy enshrined unconventional warfare as the wave of the future and caused a precipitous drop in

interest in the nuclear battlefield. Although the old FM 100-5 contained a chapter on tactical nuclear war and a segment on tactical weapons, they remained largely undigested lumps. The new doctrine, while not doing much better in terms of detail, clearly states the requirement for nuclear and chemical planning. Given the Threat's doctrine and capabilities, anything less would qualify as foolishness.

COROLLARIES

Nothing said thus far should provoke surprise or disagreement. But if the three principles can stand as propositions, then their corollaries should prove of intense interest and concern to the infantry officer. Stated simply, the requirement for deep attack leaves the infantry brigades and battalions with far less support in terms of aircraft and artillery than most infantrymen ever dreamed. It follows, then, that they must find ways to compensate.

The new doctrine charges the corps commander with the deepest battle and frankly acknowledges that air interdiction provides the primary weapon. Depending upon the situation — specifically, the amount of flexibility the corps commander has in positioning — some artillery units may find themselves allocated against this mission. Unquestionably, air assets will be scarce, particularly early in the battle. By doctrine, the Air Force concentrates first on air superiority. The assignment of deep interdiction missions will absorb some of the aircraft capable of performing both interdiction and close air support (F-4s now, but F-16s later). Furthermore, because they will operate beyond artillery range in most cases, some aircraft will have to be used to suppress an enemy's air defenses. Thus, fewer air assets will operate at the FLOT.

But the paring away of assets does not stop at the corps. The division commander must interdict units in his area of influence (15 to 70 kilometers from the FLOT in distance, 24 hours in time). Again, aircraft and artillery assets will have to carry the burden. The aircraft will most likely include armed helicopters, thus further depleting the assets infantry commanders have routinely counted on. Additionally, under both the old and the new doctrine, the division commander is responsible for counterfire and will have to allocate additional artillery against this requirement. Simple arithmetic, therefore, dictates that not much support remains.

Of course, the division commander does have the responsibility for providing close-in fire support. But the Field Artillery School, which trains the fire support coordinators, has clearly signaled its view of the situation: "Faced with the requirement to attack three distinct target sets concurrently, the division commander simply can't afford to farm away up to two-thirds of his field artillery for a single purpose." Recognizing that most divisions have only four organic artillery battalions, it becomes readily apparent that no brigade commander can assume he will have a direct support artillery bat-



talion committed totally to him. He may find that "his" artillery has been given higher priority targets elsewhere.

The infantry commander, of course, should not view this state of affairs with unalloyed horror. The premise underlying these requirements is that it improves rather than aggravates his problem at the FLOT. Numerous studies and simulations show that successful interdiction does reduce or delay the enemy forces that arrive at the FLOT. Similarly, counterfire increases the effectiveness of our own direct fire systems.

The deep battle and counterfire, though, really treat the cause (echeloned forces) rather than the symptom (the number of enemy soldiers arriving at the FLOT). The challenge is to keep the friendly units at the FLOT from perishing from the symptom. This is the challenge that confronts the brigade and battalion commanders and the operations officers most directly. They must find ways to compensate for the reduced support, because their task remains formidable; they must deal with the assault echelon regiments, which will prove the most difficult to counter, for they will arrive in combat formation, one-half to two-thirds of the force, augmented by most of the supporting artillery.

Under the old doctrine, the infantry commander could have expected to begin engaging the enemy's lead elements several kilometers from his position with a combination of close air support, armed helicopters, and artillery. While he may still have these available, there will be far fewer of them. Accordingly, three options come to mind: electronic warfare support, engineer support, and maneuver.

OPTIONS

For several years electronic warfare has been recognized as a form of combat power. Jamming assets available to U.S. forces tend to favor their use in the close-in battle. This, coupled with the decline in other support means, argues that our front-line commanders should have priority on the use of these assets. But commanders must carefully plan and time their use. If jamming is employed too early, an enemy can overcome it by switching frequencies or locating the sources and eliminating them. If used too late, jamming will also be ineffective. Properly used, jamming can destroy an

enemy's ability to coordinate his fire and maneuver elements, essential for any successful assault.

Similarly, engineer support favors close employment, and the infantry commander would do well to fight for his share of that support — it can aid his own mobility and survivability and hinder an enemy's movement. Skillfully placed obstacles such as tank traps or minefields will improve the effectiveness of all weapon systems. Bunkers and other defensive positions protect our own weapon systems and make them more effective by shielding the gunners from small arms fire and from shrapnel. Engineers can also improve a unit's mobility by clearing paths and filling ditches. Such support may prove crucial if the maneuver scheme calls for a rapid disengagement.

Every commander, needless to say, should have a maneuver scheme, and an infantry commander must focus on maneuver as a way of avoiding an enemy's strengths while attacking his weaknesses. The specifics will vary from one situation to another, but the need for a maneuver plan will remain constant. No longer can commanders think in terms of occupying a piece of terrain and holding it to the death, for that is exactly what will happen. They must use terrain, but as a means rather than an end.

CONTINUOUS PLANNING

Not all of the demands imposed by the new doctrine manifest themselves as requirements to offset reduced support. Some appear in the planning and fire coordination process. Most obviously, the requirement for continuous planning for nuclear and chemical fires will demand considerable attention. As the new doctrine suggests, these weapons have their greatest effectiveness when they are used against deep targets where an enemy's formations are most vulnerable and the effects on friendly forces are least. But the range of the present artillery-delivered weapons (under 30 kilometers) will limit the use of many of the tactical and chemical systems to within a reasonable distance of the FLOT.

Unfortunately, most U.S. officers are singularly ill-equipped either by mental preparation or tactical practice to get the most out of such weapons. The first task for all concerned, therefore, is to learn in detail the effects of nuclear weapons, as much for what they will not do as for what they will. Artillery-fired atomic projectiles have relatively small yields, and they require precise target information. Secondly, the infantry commander must thoroughly understand the release system and delivery constraints. If he simply leaves this issue to his artillery liaison officer, he may find himself without nuclear weapons when he most wants them.

A third point pertains to both conventional and unconventional weapons. Many artillerymen and even more (approaching most) infantrymen do not thoroughly understand the fire support process, although it probably

receives more lip service than any other aspect of the complex task posed by tomorrow's combat — that of orchestrating or synchronizing the battle. That the process is not well understood should surprise no one. All too often, the infantry and artillery train separately. When they do train together they plan separately. That is, the S-3 plans a maneuver and delivers it to the FSO, who then plans the support.

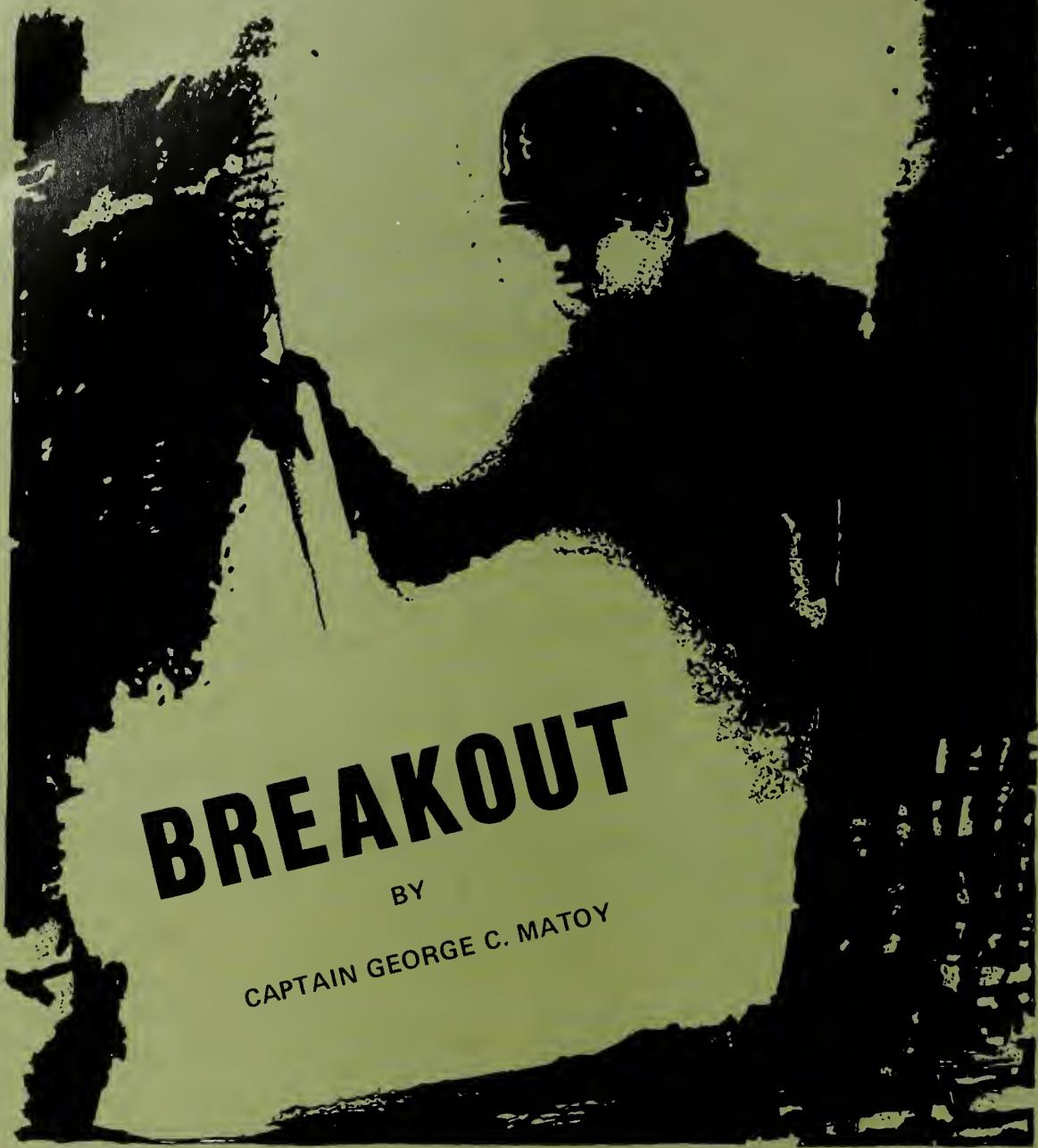
The system is also complex. In fact, the process of winnowing targets from masses of intelligence, comparing them against established priorities, and allocating them to delivery systems and munitions has outstripped the manual capability of the division artillery and fire support element. But the commander who would win must thoroughly understand the capabilities and limitations of the system.

PRIORITIES

Target priorities will weigh heavily in any future conflict. We will face more targets than we can kill, so we must shoot at the right ones. To comprehend the problem, one simply has to know that it is possible for a direct support artillery battalion to receive requests for fire from 36 sources. Granted, the company FIST and battalion fire support officer are responsible for directing traffic, but the commander's priorities of targets provide a critical element in effective fire distribution. In the absence of intelligent guidance from the maneuver commander, targets tend to be fired on a first-come basis, a process that will certainly waste scarce resources and jeopardize the firing unit for little or no real gain. The only solution to this problem is close and continuous practice between the commander's staff and his supporting elements. Command post exercises provide an ideal vehicle, but they must be frequent, well-planned, and fast-paced.

The new FM 100-5 and the TRADOC pamphlet do indeed herald significant changes for the infantryman. Under this doctrine, and contrary to our historical practice, he will have less with which to do his job. If all goes as planned, he will also have less to do, but still he must prepare to offset the loss in fire support assets by using creative maneuver, electronic warfare, and engineer support. He must also thoroughly acquaint himself with the procedures and effects of nuclear and chemical weapons. And he must study intensively the fire support system so that he can get the most out of his remaining assets. If he does all these things, he will have created the opportunity for victory.

LIEUTENANT COLONEL JERRY M. SOLLINGER, an Artillery officer, is a research fellow at National Defense University. He holds a Ph.D. degree from the University of Pittsburgh.



BREAKOUT

BY

CAPTAIN GEORGE C. MATOY

On 31 January 1942, after his soldiers had endured a siege that lasted 73 days, German Field Marshal Friedrich von Paulus surrendered to Soviet forces near Stalingrad the remnants of his encircled Sixth Army plus half of the Fourth Panzer Army, a total of some 91,000 men. In the more recent 1973 Arab-Israeli war, the Egyptian Third Army was virtually encircled by Israeli units and only narrowly escaped destruction.

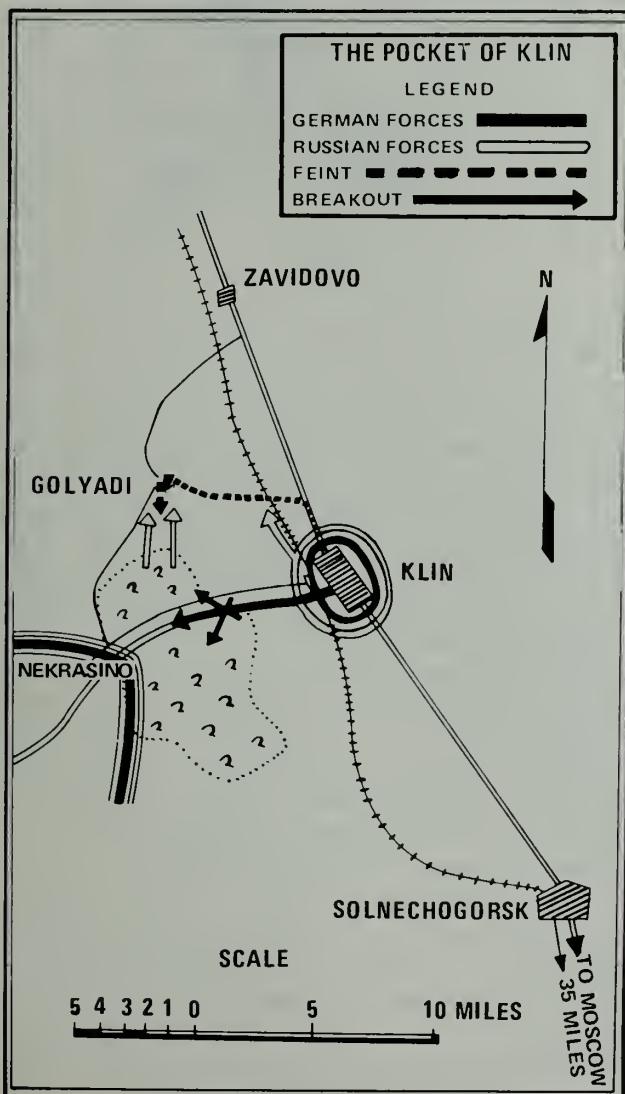
Since 1945, the development of large mobile forces has given an offensive commander the wherewithal to maintain a special sort of freedom of operations and to carry out rapid advances, deep penetrations and swift turning movements. Conversely, a commander defending against such forces must now take swift action and make very sound tactical decisions to turn them away before his own can be encircled and destroyed.

The commander of the German 1st Panzer Division faced this kind of problem in late 1941 on the Eastern Front.

When the German offensive against Moscow came to a halt on 6 December, the 1st Panzer Division was some 15 miles north of the Soviet capital. It was immediately ordered back to Klin and instructed to keep the route through that town open for other withdrawing German forces (see accompanying map). Because deep snow prevented cross-country movement, the highway that ran through Klin was the only route over which mechanized and motorized columns could withdraw.

After fighting the enemy as well as the weather, the division reached Klin where it succeeded in holding that important junction against persistent Soviet attacks until the other German units had passed through. At that point, though, as the division prepared to break contact and withdraw to Nekrasino, it found itself completely surrounded by strong Soviet forces. Its higher headquarters ordered the division to abandon its vehicles, if necessary, and to break through to Nekrasino where it could link up with other German forces.

Unfortunately, on several previous occasions the Soviets had cut the road to Nekrasino, during which times other German units had lost numerous vehicles in



breaking through. These wrecks had piled up on either side of the road with little more than a narrow lane between them.

After ordering a reconnaissance in force, the division commander felt that Soviet resistance was weakest in the area southeast of Klin and that a breakout in that direction would most likely succeed. The terrain, however, was such that practically all of the division's vehicles would have to be left behind, and there were about 1,000 wounded German soldiers in Klin who could not be evacuated without transportation. In addition, despite having lost a lot of equipment, the division still had a large number of vehicles, and the commander was loath to give them up if he could possibly avoid it.

After a short meeting with his staff and senior officers, the division commander decided to keep his vehicles and to break out along the road to Nekrasino, although he knew his units would probably meet strong Soviet resistance. He was also determined to evacuate as many of the wounded soldiers as possible.

In preparing to break out, the division made good use of its experiences during a previous encirclement at Kalinin. There, after carrying out a feint in one direction that had diverted some of the encircling Soviet forces, the division had succeeded in making a surprise breakout, losing no equipment and suffering few casualties. The great flexibility of its artillery had been decisive. By shifting its fires rapidly from target to target, the artillery had been able to support both the diversionary and the main attacks. Equally important, the division had used in its main effort those tanks that had survived the diversionary maneuver.

DIVERSION

After carefully surveying the situation around Klin, the division commander decided that all the available tanks, one company of armored infantry, and one rifle battalion would conduct a diversionary breakthrough north of Klin, after which the force would pivot toward the west and the town of Golyadi. There, it would turn sharply to the south and attack toward the Nekrasino road.

The main breakout along that road would be launched as soon as the Soviets had reacted to the threat near Golyadi and had begun to pull their forces away from the main road to counter the Germans' turning movement. Initially, the entire division artillery from positions around the railroad station in Klin and all of the available antiaircraft weapons would support the diversionary attack.

The intended deception was completely successful. The German diversionary force fell on the Soviets at Golyadi and caught them by surprise. The Soviets began to shift their forces to meet this German attack, which they assumed to be the main breakout effort. (Incidentally, the attacking German troops had not been told that their effort at Golyadi was no more than a feint. The division commander felt that the soldiers who were carrying out

the feint would not fight with quite the same zeal if they knew that they were being used merely to deceive the Soviets.)

28

As the Soviets began to shift units from the Nekrasino road, the commander of the 1st Panzer Division decided that this was the appropriate time — about noon of the same day — to launch the main breakout. On a prearranged signal, most of the artillery and antiaircraft weapons shifted their fires. Only one artillery battalion continued to fire on the old targets to cover the withdrawal of the diversionary force.

The division's armored infantry battalion drove a gap through the Soviet lines, and the units that followed widened it. A number of the tanks that had taken part in the diversionary maneuver had made their way to Klin by this time and were committed on both sides of the road. Under their protection, the wounded soldiers, on trucks and sleds and accompanied by armored personnel carriers, were moved out of the town.

By now, too, the artillery was covering the flanks of the breakthrough column, while in the eastern part of the city combat engineers held off a Soviet attempt to disrupt the breakout. The entire force eventually fought its way through to Nekrasino, where it linked up with other German units.

While the division undoubtedly owed much of its success to the proper employment of its combat elements, strict traffic control permitted it to evacuate a large number of its vehicles, and this really determined the final outcome of the operation. Vehicles that broke down were immediately pushed off the road to keep the column moving without interruption, while a large number of slightly wounded officers and noncommissioned officers were added to the military police to help enforce traffic discipline.

Substantially intact, the 1st Panzer Division emerged from the pocket of Klin taking along its casualties and much of its equipment. Twenty-four hours later, on a different sector of the front, it was again in action.

TACTICAL CONSIDERATIONS

As can be seen from the above example, the commander of an encircled force has a lot to think about in planning and executing a successful breakout. He should determine the proper time and direction of his breakout only after he considers the following questions:

- What is the earliest possible moment we can launch our attack?
- Where is the enemy weakest?
- What is the shortest route to friendly lines?
- What direction involves the fewest terrain difficulties?
- What hour and what weather conditions favor the attack?
- Should we select more than one direction?

Usually, unless the breakout attempt is coordinated with the approach of a relief column, the unit attempting

the breakout should use the shortest route to other friendly forces. Accordingly, the choice of route is crucial, and the direction that favors the terrain and the weakest enemy resistance should not be chosen unless that route favors a rapid link-up with friendly troops.

The commander must also consider the physical fitness of his troops. If they are in good fighting condition, he might consider a night attack. If the troops are battle-weary, though, the breakout may be best conducted in



the daylight hours to permit better command and control.

A breakout in multiple directions offers only a small chance of success. In fact, it is usually a last ditch effort primarily to disperse the total force so that the smaller units can reach the friendly lines. Such an act of desperation should be considered only in those occasions when a relief force is not expected and the distance to friendly lines is so great that a breakout can no longer be attempted by the entrapped force.

If a breakout attempt is to succeed, an effort must be made to strengthen the combat power of the fighting units at the expense of the support units. The selection of personnel for transfer from support units to combat units may be a slow process, but it is important if the breakout attempt is to stand any chance of success.

In encirclements, for example, the support units usually outnumber the combat forces, and while they may be superfluous to the actual battle, their presence places an additional burden on the commander. Support units can serve as a manpower reserve that can be used to assist the combat units. Care must be taken, though, not to assign too many support troops to a combat unit. The whole

procedure can be counter-productive if these men become a burden to the combat units to which they are assigned. An alternate method might be to form units composed of support troops and to hold them in reserve under tight control.

Engineer activities that are designed to prevent or slow the pursuit by enemy forces over abandoned terrain must be ordered and executed on time. It is advisable to limit such operations to a few key areas. Troops usually have neither the time nor the desire to carry out extensive or time-consuming destruction of material or equipment. On the other hand, the commander must make sure there is no senseless mass destruction of material or equipment, which is characteristic of trapped soldiers.

DECEPTION

Because the success of a breakout also depends on deception and secrecy, as few subordinate commanders as possible should know about the actual breakout plan, and telephone and radio communications must be closely monitored. Radios, though, do offer the best means of deceiving the enemy. Such deception may be accomplished by transmitting false messages about the unit's intentions, SOSs sent to imaginary relief forces, reports intended to confuse the enemy about actual unit strength, misleading requisitions for resupply, and false information regarding drop zones and landing areas.

Feints and false maneuvers go hand-in-hand with the deception plan. Making movements in different directions each night, launching attacks with limited objectives from various points on the perimeter, and stubbornly defending important terrain features can help the trapped unit camouflage its intentions.

Apart from the diversionary plans, the most important tactical consideration is the gradual change from the defense to the attack. As the situation permits, soldiers who can be spared from defensive missions should be transferred to the area selected for the breakout attempt, but some may need a rest before they are again committed. This transfer involves some risk, of course, because it does require the shortening of the defensive lines. Confusion can be lessened if the entire pocket moves in the direction of the attempted breakout. This allows the shifting of forces to be accomplished more easily and reduces the seriousness of minor terrain losses. Additionally, it lessens the feeling of entrapment that many soldiers suffer from if they believe there is no escape and a "last stand" seems imminent.

Of course, the commander and his staff must always be ready to take countermeasures against serious emergencies. It may become difficult for the commander, as the pressure increases, to distinguish between important and unimportant developments. He must bear in mind, therefore, that his reserves are limited and should not be committed unless a major threat develops at a decisive point.

As the time for the breakout nears, and as the tension

within the pocket builds, the commander must become a tower of strength, conscious that his troops are watching his every action. Even his command post's location can be important; it should always be approximately in the center of the pocket. Under no conditions should the operations of an encircled force ever be conducted from outside the pocket.

The soldiers' morale may be bolstered if the commander issues only brief, clear orders, provides reassuring information, and makes frequent visits to critical points on the perimeter. Exaggerated optimism is out of place. Soldiers want to know the truth and usually discover it for themselves, and they will lose confidence in their commander if they believe he is tampering with the facts. Usually, the truth, told without an emotional display, reassures and can even stir the troops to greater efforts.

STEPS

In order, then, the steps to a breakout attempt are as follows:

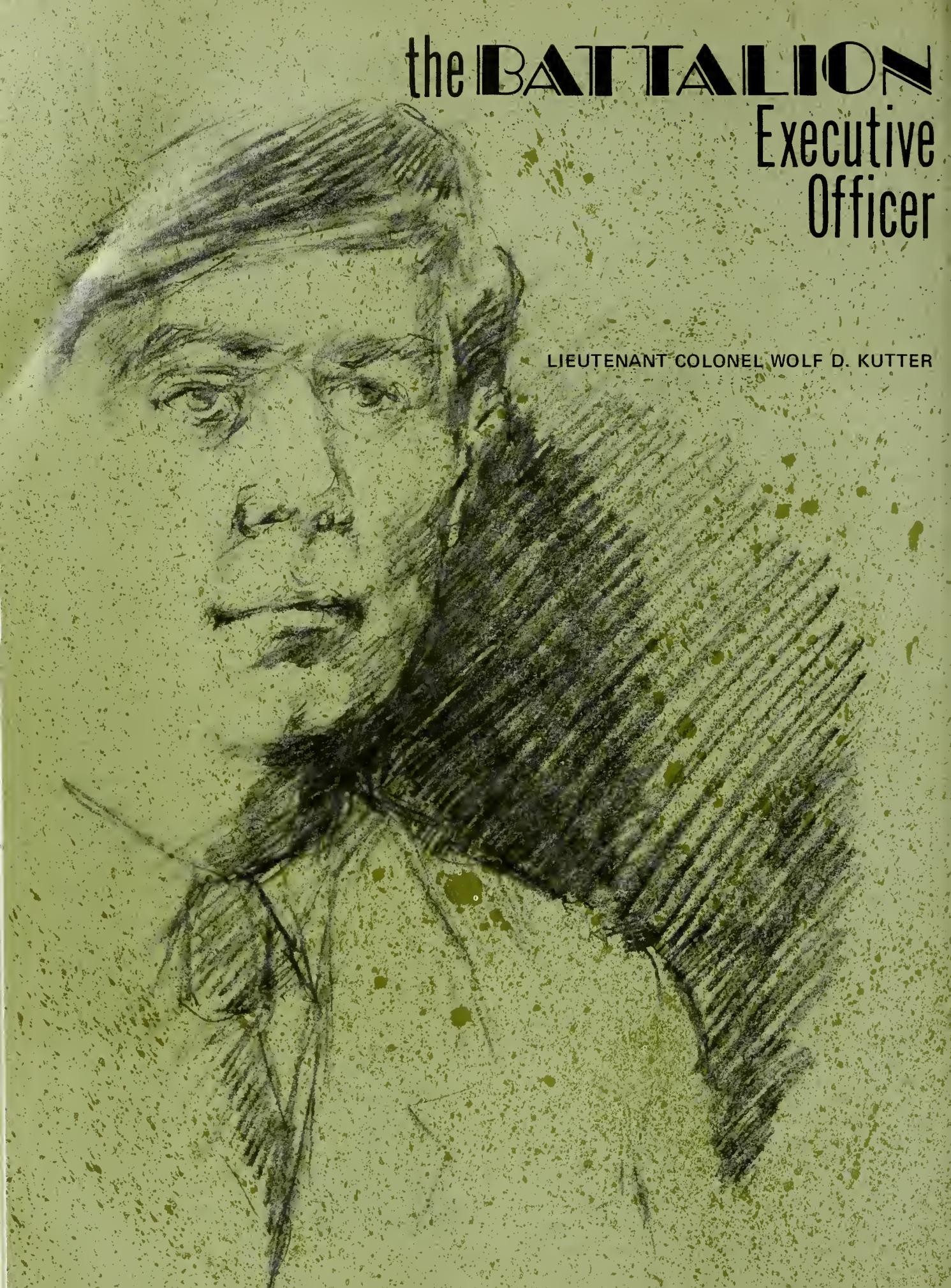
- Emphasize the defense.
- Establish a chain of command.
- Stabilize the defense.
- Reinforce the combat units with support troops.
- Evacuate nonessential or wounded personnel, if possible, and destroy excess equipment.
- Gradually shift emphasis from the defense to preparations for the breakout effort.
- Form the breakout force.
- Shorten the defense perimeter, while strengthening the sector selected for the breakout.
- Carry out deceptions, including feints or diversionary attacks.
- Execute the breakout.

Today's combat commander can expect to face an opposing force that is built around highly mobile elements supported by strong tank reserves. These forces can conduct high-speed combat operations that favor encircling and destroying their opponents.

Therefore, the commander of a force threatened with encirclement must take immediate steps to break out of his opponent's grasp. And if his tactical decisions are both timely and sound, he can rest assured that he and his soldiers will live to fight another day.



CAPTAIN GEORGE C. MATOY is assigned to the Directorate of Training at the U.S. Army Signal Center, Fort Gordon, Georgia. He is an ROTC graduate of New Mexico Military Institute and holds a degree in political science from Kansas State University.



the BATTALION

Executive Officer

LIEUTENANT COLONEL WOLF D. KUTTER

An assignment as a battalion executive officer is a challenging one, and one that many officers look forward to. It can also be either the most fulfilling one an officer ever had or the most frustrating, for he must try to accomplish the unit's mission and promote the welfare of the soldiers of the battalion at the same time.

In the spirit of professional exchange, therefore, I would like to share some of my own experiences as a battalion XO in the hope that they might prove helpful to other officers who may be assigned to the job.

Needless to say, it is a position that must be defined from the outset by the battalion commander. A commander, for example, might entrust his XO with being the unit's deputy commander, as practiced by the West German Army, or he may feel more comfortable with his XO acting as the chief of staff for the battalion's principal and special staff officers. No matter how the executive officer's role is defined, though, the outcome ought to be that the battalion's command group, consisting of the commander, the command sergeant major, the XO, and possibly also the S3, ratify a kind of contract of expectations that everyone clearly understands. The command sergeant major, for instance, works *for* the battalion commander and *with* the XO.

A new XO should be aware of the many roles he will be expected to play: He will be a teacher, conciliator, sounding board, investigator, coordinator, facilitator, planner, supervisor, counselor, and leader. In all of them, he should lead by example and avoid the pitfalls of "managing."

It has been my experience that most of the soldiers, noncommissioned officers, and officers of a combat arms battalion want to do a good job. I believe that most soldiers are happy in a well-disciplined unit, that NCOs will exercise whatever authority they are given, and that today's combat arms officer is the best I have ever seen.

If all this is so, then what is the job's special challenge?

First, some of the problems the new XO faces are unique to that job. Although he has seen most of them before, he will be seeing them from an entirely different perspective.

The pace of the job is especially hectic because of annual inspector general (AGI) visits, maintenance assistance team reviews, and the unit's training activities. Maintaining the battalion's equipment and managing personnel, logistics, and financial resources effectively usually also fall within the XO's special domain. In addition, he has to accomplish all of these tasks in the face of reduced manning levels and a potentially high turnover of personnel, which means that policies, procedures, and SOPs need to be constantly reviewed, reinforced, revalidated, and retaught.

The XO often finds himself explaining key rules for the third or fourth time in a year because the people responsible for adhering to them are gone. He can expect breakdowns in the various support systems in the battalion because of what I call an "underlap" of personnel. He may be too thinly staffed to have an understudy for the PLL clerk who knows where to deliver the key req-

uisition form so that a critical part for his M113 can be drawn..

People are not the only challenge. Equipment is another. Training hard with our weapons, our wheeled and tracked fleet, and our communications equipment is our reason for existing; we are expected to be a combat ready force. Sometimes, though, reducing the use of equipment can be an advantage. There is no profit in training so hard today that the next command group has to have as its first priority a "get well" equipment program.

Repetitive, thorough maintenance training that includes operators and supervisors will preserve equipment, reduce the demand for spare parts and major assemblies by 20 to 40 percent, and also improve readiness. In my battalion, the time we dedicated to equipment recertification because of the high turnover of personnel paid high dividends.

All of these challenges can be seen in terms of goals, and the quest for a combat ready battalion can be broken down, particularly as it concerns the XO's role, into immediate, intermediate, and long range goals.

My own immediate goal as an XO was to mitigate frustrations, particularly among noncommissioned and junior officers — frustrations caused by not having the needed tools, spare parts, manuals, or supplies — and to troubleshoot any problems in the personnel, maintenance, and supply systems. For example, if the direct support maintenance company failed to honor an unserviceable equipment turn-in date and the battalion motor officer did not get immediate satisfaction, it was time to act.

Intermediate goals are the ones most commanders concentrate on, such things as the successful completion of ARTEPs and AGIs, and general defense plan exercises, all in support of combat readiness. As a result, the XO will usually spend most of his time on these goals as he plans, organizes, and coordinates the staff to accomplish those missions. But his focus really should be wider.

His long range goal should be to make sure the young men who join his unit today become tomorrow's successful leaders. Through his efforts, a squad leader who reports for duty with previous assignments in recruiting, ROTC, and at a training center should become a successful platoon sergeant. Similarly, he should see that each junior officer gets the professional development he needs to perform vital roles in combat at least one level above his current rank.

In short, the XO has a trustee responsibility. He must not only achieve the highest possible readiness for the moment but in that process set aside the time to build tomorrow's Army leadership today. In addition to these professional development programs, he should become involved in programs that include the soldier's family, the facilities he lives in, and the equipment he operates.

In reviewing my tenure as a battalion XO in light of these goals, several issues come to mind having to do with the differences between the XO as chief of the battalion staff and the XO as deputy commander.

As the chief of the battalion staff, I held three short morning meetings a week to coordinate actions, review programs, and issue instructions. If I had been limited to that role, however, the battalion staff would not have been able to accomplish as much as it did. Therefore, I carefully nurtured my role as deputy commander, because as the principal administrator and logistician of the battalion, I had to have the force of law behind any instructions I issued. Extensive face-to-face discussions about problems, especially with company executive officers and their commanders, were normal, and we tended to resolve those problems more easily that way. We rarely had to involve the battalion commander in trivial details.

In the continuing tug of war between centralizing and decentralizing functions, I resisted all efforts to wrest control from subordinate commanders, and similarly refused to centralize functions under battalion control. PLL clerks were not centralized under the battalion motor officer, the battalion supply activity center remained disbanded, and financial resources were parceled out to company commanders. This kept things cleaner and simpler, and it put the burden of performance where it belongs — on the subordinate “green tabbers,” who are always ultimately responsible.

This is not intended to imply that the battalion staff was secondary to the company commanders; there was no competition. Our purpose was simply to provide superior service and good staff products. We encouraged the companies to regard the battalion staff members as their best employees, and the staff members likewise had ready access to points of contact within the companies to get their jobs done.

On the assumption that an XO should state policy based on the battalion commander’s guidance while the staff should develop procedures, in our battalion we preferred to give mission orders to the staff, we kept reports and statistics to a minimum, and we had frequent face-to-face communications with our subordinates — and with our superiors, too, for that matter. This face-to-face communication process can be compared to the function of the cop on the beat — the more he walks, talks, and observes, the better feeling he has for what is really going on in the neighborhood.

The XO usually finds that various members of the battalion will bring policy issues to him soliciting his support for one action or another. Invariably, in considering these issues he should ask himself, “Am I trying to achieve the highest standards in one of the battalion’s functions or subsystems at the expense of another?” The correlative question is, “Can we accept something less than 100 percent in that function — perhaps 85 to 90 percent — and thus avoid sacrificing that other function?” For example, we could say, “We’re going to redo all our clothing records for the AGI.” Or we could say, instead, “We’ll validate all clothing records against the Unit Manning Reports, seeing that the S4’s SOP specifies such checks monthly and that supply sergeants are actually reconciling their company clothing records transactions

with the S4 CTA 50-900 section monthly.”

Another recurring issue is that of specializing versus generalizing jobs. Having seen lieutenants switched from one position to another within a battalion every six months for “career enhancement” purposes, I can only suggest that trying to make everyone a generalist is self-defeating. We have enough turmoil among our leaders without creating more. What we need to do is to build expertise, which means specializing, not generalizing. There is nothing more valuable than an S1 who has held the same job for two years. (Not to mention an XO who has been around for a while. Today, a battalion commander often has as many as three different XOs during his 30 to 36 months of command.)

Junior officers in particular need to be left in one place long enough for them to develop a bond with their NCOs; such a bond promotes trust, mutual respect, and unit cohesion. Further, it is precisely the long range goal of professional development that can bring out the tactical expertise of an S1 or S4. The XO should have these officers enroll in correspondence courses or professional writing programs to expand their tactical knowledge as well as to raise their esteem among their peers and superiors.

TECHNIQUES

In dealing with all of these interrelationships between challenges, goals, and certain key issues, the XO has to develop some techniques for problem-solving. These techniques can be discussed in terms of planning, organizing, controlling, supervising, and evaluating.

Planning. When the XO is doing his planning, he needs to look ahead three to nine months and develop his own detailed calendar of events, making sure that he and his staff have consistently touched base with the division and brigade staffs. Planning requires him to be his battalion’s ambassador in dealing with the various organizations. If the people in these organizations regard him as such, they are more likely to tell him about crucial changes that affect his battalion.

The XO must also visualize proposed plans and the arrival of new equipment in terms of the work effort required of every echelon in the battalion. This may entail reconciling a “can do” attitude with the actual productivity of the various organizational echelons. A case in point is determining the number of mechanic manhours actually available against the projected maintenance requirements generated by back-to-back FTXs plus an ARTEP.

Organizing. When it comes to organizing, a multilevel approach is best. The XO’s first step is to make sure the staff officers are organized to offer the best assistance to him and the battalion commander. At the lower level, the XO should ask if the effort is organized so that the NCOs have what they need to do their jobs — people, time, supplies, equipment, and facilities.

Organizing also means that directives and procedures

such as maintenance SOPs, driver training directives, and platoon ARTEP letters of instruction are widely distributed. It also means that everybody is given the time they need to read and comprehend all of this information.

Finally, organizing implies that the XO has a firm grasp of the key indicators that provide him with warning signals. I am not advocating management by statistics. What I am advocating is the organization of controls, the formulation of key questions, and some indications that a plan is on track. Thus, knowing what to look for on a readiness report, a technical inspection sheet, or a deadline report, and then asking the right kinds of questions, constitutes mental organization.

Controlling. Communicating and controlling can be among the most fascinating aspects of the XO's job. Face-to-face communications are usually more warm and meaningful, especially when they are coupled with positive reinforcements. Enlisted soldiers and NCOs should see that the XO cares when he comes to their worksite, and the old truism that what is checked gets done still holds up. It makes a big difference when the XO asks a company motor sergeant about his zero balance lines, about the reconciliation of due outs, and how his new mechanic is working out, and thanks him for a great effort on the last FTX.

Because control involves communications, the XO should encourage the flow of information. He needs to let his subordinates, especially the staff officers, know that he wants even bad news to come to him promptly. His subordinates must also be encouraged to build open, honest communications in all of their functions. This means with and between constituents — S4 to supply sergeants, company XOs, the brigade S4, and so on. When communications are open and frank, and the XO makes the rounds of his own constituents — the brigade staff, the brigade XO, and so on — he will undoubtedly pick up enough information to keep the battalion commander informed and two steps ahead of any problems.

And if he finds that the best staff directives have been modified, it is his job to find out why.

Supervising. The XO should decide first what is important enough to warrant his personal attention and what the staff should supervise for him and the commander. He should remember that oversupervision stifles initiative; it does not allow people to grow in their jobs, to make enriching mistakes, or to produce up to their potential. So the XO must decide carefully what he wants to observe, what he should check, and what he really needs to supervise.

Good staff supervision will highlight problem areas, but before he jumps, the XO should ask himself if the problem is structural or procedural or if it reflects a lack of resources or a failure to adhere to published directives. In other words, he should let his own good judgment tell him what to do. (For example, when a company fails to turn in its Class IX report, he might consider that the company XO is new and the motor sergeant is on leave.) And he should remember that short-range solutions often

have long-term ramifications.

Sometimes just standing for a few minutes at one of the key intersections of the battalion (places such as the mess hall, the motor pool, and near billet entrances) can give him an indication of the progress that has been made and of what still needs to be done. These standards should relate to the basic tools readily at hand for the junior officers and the noncommissioned officers. Standards expressed in terms of the soldier's manuals, battalion SOPs, and technical manuals improve comprehension, foster the XO's role as teacher, and provide a degree of continuity.

Evaluating. This is something we generally do not do very well. It is probably the pace in the battalion that keeps us from seeking the feedback we need to do a good job of it. Nevertheless, the XO must insist that it be done continually; he must cull the results from after-action reports and then integrate better methods of doing things into the next cycle of events.

These "oughts" of what to do should then be related to the immediate, intermediate, and long range goals that have been established. Feedback may tell the XO that his mess hall account went into arrears on the last day of the month because the dining facility manager overbought Class I items. An evaluation may indicate that this is a recurring problem and that the wrong kinds of main dish items were purchased.

Similarly, feedback may tell the XO that the battalion's administrative transactions are not timely and that, in fact, his people do not know how to use the various support systems effectively. Whatever his evaluation of these and similar problems, the result may very well be a "dirty dozen" list that he and the command group will have to work on. And if things should ever get monotonous, he may ask himself what else can be done to unlock the human potential in the battalion, what small action if implemented might pay off in terms of his goals.

Any officer who is fortunate enough to be assigned as a battalion executive officer should enjoy the opportunity and feel rewarded by it. During his tenure, he can be certain that tomorrow's leaders will be preparing themselves by following his leadership and his example.



LIEUTENANT COLONEL WOLF D. KUTTER is assigned to the office of the Comptroller of the Army in the Pentagon. A 1963 OCS graduate, he has served in numerous Infantry assignments, including one as a battalion executive officer in Germany. He holds baccalaureate and master's degrees from The American University and has completed the Armed Forces Staff College.

TRAINING NOTES



THE BAYONET

JOHN P. GARZONE

After a ten-year absence from the Army's training calendar, bayonet training has reappeared — much to the delight of some and the despair of others. Although many soldiers feel that the bayonet is little more than an expedient can opener, and should remain so, the bayonet has found staunch support with others who feel it embodies an infantry soldier's will to fight. The question today, though, isn't whether soldiers should have a bayonet, but rather how they should use it. The answer depends upon your view of modern combat.

THE GREAT DEBATE

Any proponent of bayonet training will quickly tell you its most important result as he sees it: The training promotes aggressiveness and confidence in each soldier. He believes that hand-to-hand combat is the most feared and desperate of situations, and that only a trained bayonet fighter can survive it and win. This view is usually countered by the observation that there is little need for bayonet fighting in an age of automatic weapons and mutually

supported firepower. Those who argue against the bayonet feel that bayonet fighting is an undesirable if not unacceptable tactic. Both sides can call upon a mountain of historical data and experience to argue their cases.

The bayonet saw its greatest use during World War I when an infantry assault with fixed bayonets was the only way ground could be gained and then held against resistance. The soldiers who did not use their bayonets aggressively paid the price. The arrival of the machinegun shortened the day of the bayonet and its use decreased as automatic weapons multiplied.

During World War II, the bayonet was confined to small and desperate engagements or individual acts of heroism, and its mere use in combat became remarkable and awe-inspiring. For most, it became a forgotten weapon and the bayonet fighter a ghost of the past.

Today, the trained bayonet fighter is coming back, and whether you love it or hate it bayonet training is here again. So, what's a trained bayonet fighter?

According to the War Depart-

ment's 1918 bayonet training manual, a trained bayonet fighter was a soldier who could disable or kill an opponent with a fixed bayonet using any of four basic attack movements. Those same four movements are taught today at Fort Benning to all new infantrymen in a program of instruction called Instinctive Rifle Bayonet Fighting (IRBF) techniques.

IRBF stresses the four attack movements and is aimed at training a soldier to use them quickly and instinctively if the need ever arises. The instruction program covers nine hours, which are divided into six hours on learning the movements and three hours on a bayonet assault course.

The new infantrymen first learn the attack movements on a drill pad with each soldier alternately playing offensive and defensive roles. During the six one-hour periods, each soldier learns the thrust, butt stroke, slash, and smash attacks and how to combine them with parry and blocking movements. The emphasis is on the offense, and the soldiers are continually urged to take the initiative and press the attack. Aggressiveness is a main goal of the training — and it

certainly teaches that.

After they have learned the four basic attack movements, the new soldiers are put through a specially constructed bayonet assault course, which is 460 meters long and quite tough to negotiate. The path of the course leads around and up a hill in much the same way an assault route would in an actual combat situation. Obstacles and bayonet targets are spotted along the course.

The soldiers first run the course in groups of ten, negotiating the obstacles and pausing at each target to deliver, on command, a specific bayonet attack. Each soldier is evaluated on how well he executes the movements, and on his aggressiveness, control of his weapon, balance, speed, and use of the proper movement techniques to get over the obstacles. Individual instruction is given on the spot to any soldier who encounters problems.

On their second run through the course, the soldiers are required to run the course as fast as possible while negotiating all the obstacles and attacking all the targets.

ADDING IT UP

The bayonet training program at Fort Benning gets high marks for promoting aggressiveness and confidence, and it does have the advantage of reinforcing physical conditioning, methods of movement, and bayonet attack techniques all at the same time. But there are some problems.

The doctrine on the use of the bayonet has not changed significantly over the years, in spite of the dramatic changes that have been made in the Army's weapons and tactics. The basic moves and counter-moves of bayonet fighting are well known and practiced by all of the world's major armies. In effect this creates a static condition with no one having a particular tactical advantage — unless the advantage is the weapon itself.

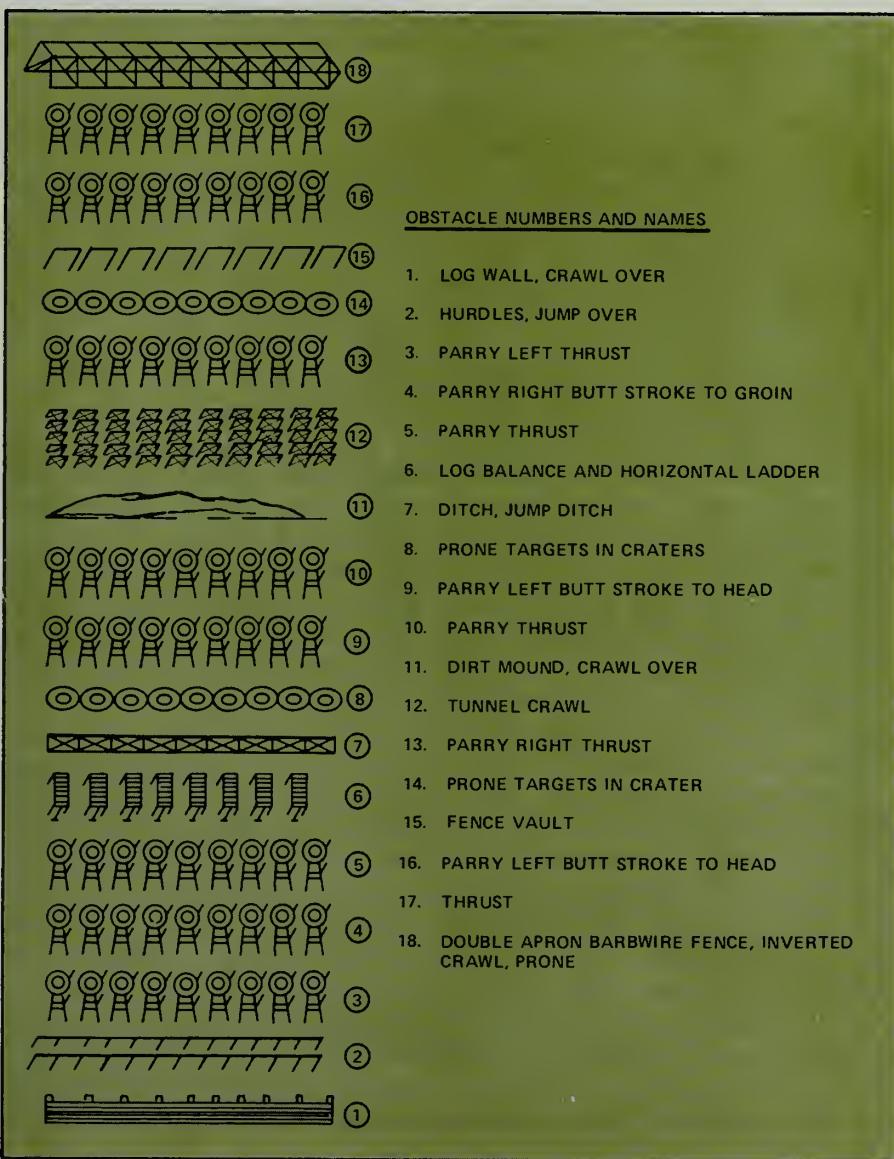
If it is the weapon, the U.S. Army may have a problem. The bayonet it

now issues to its soldiers has been reduced in length to six and one-half inches; it used to be as long as 14 inches. The soldier's rifle — the M16A1 — has also been reduced to a size and a construction never intended for bayonet fighting. Since other military forces still feature stronger weapons and longer bayonets, this puts the U.S. infantryman at a distinct disadvantage. Further, it is uncertain whether the present bayonet can be mounted or used effectively on the M203. This equipment problem is especially noteworthy, because the new infantrymen at Fort Benning must use a simulated rifle made of rubber when they run the bayonet assault course to avoid damaging their M16 rifles.

Although the current bayonet

training program aspires to teach a quick and aggressive bayonet attack with instinctive reactions, it does not actually provide for such an attack since there is no live opponent. On the drill pad, the students are taught to execute the attack movements on command. But on the course itself, the targets cannot react to an attack. In the past, the Army used the pugil stick, which, though it occasionally caused injuries, did give a degree of realism to the training. Today, there is no form of pugil stick training.

Finally, there is no provision at the present time to make sure the training is reinforced at a soldier's permanent duty station. So while the new program makes an interesting and motivating break in the routine of physical training at a training center,

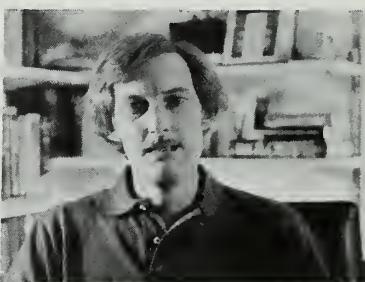


it is not yet on the training calendar of the Army's TOE infantry battalions.

Bayonet training is a constant subject of conflict for commanders and trainers alike, because it reminds everyone of the ultimate job of the infantryman to disable or kill an enemy soldier. Technology and terminology have not made this job any easier to learn or any less deadly to practice. Today's bayonet training shows that the Army can produce an aggressive

and confident bayonet fighter. What it needs to do now is to match that

spirit with the best equipment and techniques it can provide.



JOHN P. GARZONE is an instructional writer and designer with C.A. Parshall, Inc., of Columbus, Georgia, which develops Training Extension Course (TEC) lessons and other training courses for Army infantrymen. He previously served for 10 years with the U.S. Air Force as a field training and classroom instructor.

Individual Training

CAPTAIN WARREN D. WILSON

In my initial field exercise as a company commander, I directed one of my platoon leaders to prepare a defensive position blocking a critical avenue of approach. I also told him to use a hasty minefield. When I inspected the completed platoon position sometime later, I found the men well placed and the platoon's weapons properly sited. The hasty minefield area also had been neatly blocked with engineer tape. The platoon leader was convinced that his platoon could hold the position and cited many tactical considerations to support his conviction.

But there was a major flaw in his plan. The squad he had assigned to put in the hasty minefield in reality could not have done so, because not one of its soldiers knew how to

emplace, arm, disarm, or recover the antipersonnel and antitank mines. The squad leader did not even know how to record a hasty minefield. And neither the platoon leader nor the squad leader knew what type of mines or how many of them were available in the unit's basic load.

My immediate concern was to find out how this situation had come about. I discovered that the platoon had been tested on hasty minefields a year earlier during an ARTEP evaluation, and that it had passed. Since then, however, because of the rapid pace of field training exercises, it had not practiced installing hasty minefields. Instead, minefields had always been simulated, because the "men know how to install them anyway." Unfortunately, many of

the men who had known what to do had left the unit.

I also discovered in all of the platoons other deficiencies in individual skills in basic combat readiness, which pointed to inadequate individual and squad level training. Many reasons for this were cited, but the one repeated most often was the lack of time. Competing requirements, many said, took scheduled individual training time away from the squad leaders. (This, of course, also gave a weak squad leader a ready excuse for the poorly trained soldiers in his squad.)

As I checked further, I became convinced that lack of time was chiefly a convenient excuse. True, it was difficult to schedule formal training time, but there was unscheduled time

available if a squad leader would just use it — time that became available either because the scheduled training ended early, or because of short delays on a firing range, or because of pauses in the action during field training exercises. There was a lot of such time. The problem was how to use it.

My first sergeant and I believed in one basic premise: a squad leader has the primary responsibility for training his men. As the leader closest to his men he is the one they should look to for training and guidance. Whether he is an experienced staff sergeant or a young acting sergeant, the squad leader's ability and leadership determine whether that squad could accomplish its mission.

RESULTS

Stating the premise was easy. Producing results was a bit harder.

The program that worked the best for my company was based on Army Skill Qualification Training (SQT) and squad competition. Each month the first sergeant and I would select 25 to 30 specific SQT tasks to be tested at the end of the month during a Squad Competition Day. These tasks were chosen from each major SQT subject area with one to three specific tasks picked from each major area. For example, from the NBC subject area, the selected tasks might be to maintain the protective mask and accessories, to administer an antidote to a nerve agent casualty, and to initiate unmasking procedures.

The squad leaders were responsible for teaching their men the chosen SQT tasks before the competition. Although training aids and TEC tapes were available in the company area, they had to find the necessary training time.

We scheduled the Squad Competition Day in conjunction with our monthly weapon zeroing and familiarization firing. Fortunately, the range had an area large enough for us to set up the required number of test stations.

The chain of command, except for the squad leaders, administered the

competition. Each leader was made responsible for a major SQT subject area such as land navigation or NBC. He then developed the test for that station from the appropriate SQT manual. The tasks for the crew-served weapons were chosen on the basis of comparable difficulty, which meant that a line squad could be rated against a mortar or TOW section with a minimum of controversy.

In addition, we gave two written tests during the competition. The first was a simple 10-question squad member test, with questions ranging from those that might be asked by a promotion board to questions on information from the latest commander's call. The second was a 25-question test for the squad leaders. In it, the topics might range from leadership and counseling techniques to squad-leader level SQT questions.

SPOTLIGHT

On Competition Day, the squad leaders were in the spotlight as they led their men through each station. At the more time-consuming stations only two men might be chosen to perform the task, while at others all the men would be tested. The results were then averaged for each squad. This stressed the importance of each soldier being a team member, because each man's performance affected his entire squad's score.

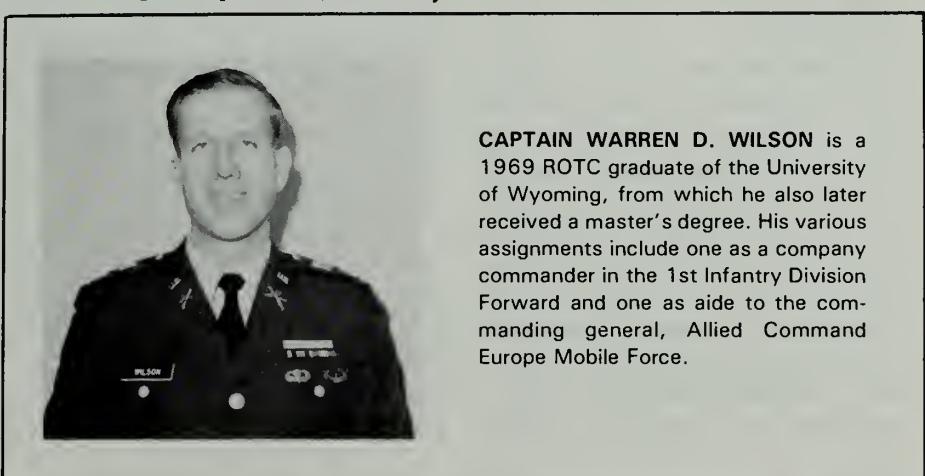
When the competition ended, each station placed the squads in rank order. Points were awarded according to squad position, thereby

eliminating the differences in scoring between the stations. Ties were broken by adding up the number of place points involved and dividing by the number of tied squads. The results were tallied and then prominently posted in the company area.

The competition always created a lot of interest and was generally the main topic of conversation for at least a week afterward. (Regardless of what soldiers may say, they thrive on good competition.) The soldiers of the winning squad were given four-day passes, while the squad leader received an appropriate letter of achievement. The second place squad members received three-day passes. The members of the most improved squad also received three-day passes. Every squad, therefore, had an incentive to do well.

This squad competition proved effective for several reasons, the principal one being that it gave the squad members a goal to strive for as a team. Additionally, in this way we could practice and test most of the basic SQT skills over a six-month period. In the process, the squad leaders learned how to manage their available time more effectively, and the company's leaders were able to assess the squad leaders' abilities to tailor their training accordingly.

What is most important, the company's combat readiness was much improved, and the next time a platoon leader was directed to prepare a defensive position and employ a hasty minefield, he could feel confident that his squad members knew how to do it.



CAPTAIN WARREN D. WILSON is a 1969 ROTC graduate of the University of Wyoming, from which he also later received a master's degree. His various assignments include one as a company commander in the 1st Infantry Division Forward and one as aide to the commanding general, Allied Command Europe Mobile Force.

ARTEP DEVELOPMENT

MAJOR RICHARD L. ST. JOHN

The various Army Training and Evaluation Programs (ARTEPs) that have been developed by the Training and Doctrine Command (TRADOC) are undoubtedly the keys to unit training. But some units have special missions for which no formal ARTEP is available. For this reason, there is a place for the development of special ARTEPs by units in the field.

The Berlin Brigade, for example, faced with a mission that requires training in military operations in urban terrain (MOUT), designed, developed, tested, and published its own MOUT ARTEP, one that was specifically suited to its unique mission, organization, and situation. The actual development work, which was divided into six phases, was done by the 3d Battalion, 6th Infantry.

Phase I, the planning phase, was accomplished by the battalion S3. This phase, which took about two weeks, included defining the problem and preparing a detailed plan and schedule that would carry the battalion through the publication of a finished product.

In Phase II the basics of the plan were implemented within the battalion. This entailed publishing the plan, allocating tasks to key members of the chain of command in the companies and staff sections, and setting up a milestone schedule. A reference library of all available MOUT documents was assembled and made available to those working on the project. Then the S2 and S3 prepared a document that contained a com-

prehensive description of the likely combat environment in Berlin in the event of war. It included a hypothetical description of the city and, generally, how each side would fight, along with some additional considerations that would affect urban military operations.

Phase III, the actual developmental period, began with the identification of all the tasks and missions that would have to be performed by individuals and units, through battalion level, in a MOUT environment. Once this was accomplished, the tasks, conditions, and standards for the ARTEP were developed in the standard ARTEP format.

Next, comprehensive support requirements were developed for each task and mission that included the opposing force, transportation, ammunition, training aids, and the evaluators and controllers needed to conduct the ARTEP. The final step of this phase was the publication of the first draft of the ARTEP.

The battalion was then ready for Phase IV, which was the execution phase. During this six-week period the battalion tested the ARTEP using several training sites in the city, ranging from sewers and subway stations to abandoned buildings, and the brigade's local training areas.

The primary purpose of this phase was to evaluate tasks and not the units that participated in the testing program. Measuring the proficiency of individuals and units in MOUT tasks and missions was secondary to confirming the relevancy of the tasks,

conditions, standards, and support requirements that had been identified and published in Phase III.

Once the execution phase was over, a more reflective analysis phase — Phase V — began. While Phase IV required all the battalion's resources and personnel, this fifth phase returned the effort to the selected members of the chain of command who had carried the load through the earlier development phase. For their critique, they solicited comments from everyone from individual soldiers to the leaders at brigade level. Next, all of the valid comments were translated into modifications to the draft ARTEP that had been used in Phase IV.

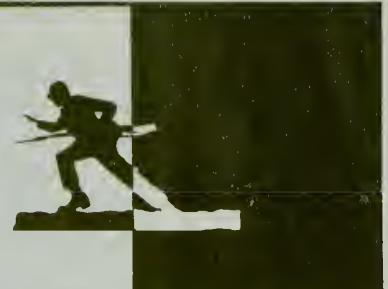
In the final phase, Phase VI, the completed ARTEP document was published and turned over to the brigade for further publication and implementation.

Many of the tasks and missions in this ARTEP, with little or no modification, are applicable to any unit that is training to operate in a MOUT environment.

In addition, the brigade's experience graphically illustrates that there is a place for ARTEP development in the field.

MAJOR RICHARD L. ST. JOHN, a 1966 graduate of the U.S. Military Academy, recently completed the Naval Command and Staff College. He holds a master's degree from the University of Arizona and his various assignments include tours as a battalion S3 with the Berlin Brigade and as SGS, U.S. Army, Berlin.

ENLISTED CAREER NOTES



FORCE ALIGNMENT PLAN

Two years ago the Army was short 16,000 enlisted soldiers in the ranks of SGT/SP5 and above. Today, that figure has been reduced to 2,650, and in two years the shortage will be totally eliminated. But that progress is partially offset by a continuing imbalance in certain MOSs. While some skills are overstrength in noncommissioned officers, others are short, particularly in combat arms skills in which there was a shortage of 7,000 at the end of September 1981.

As a result, a force alignment plan has been designed to improve the matching of skills, eliminate poor performers, retain good ones, and support the modernization of the Army. The plan includes some recent changes in policies on promotion, reclassification of MOSs, on reenlistments, and on the handling of selective reenlistment bonuses and prior service enlistments.

Several of these policy changes became effective 1 October 1981:

- Reenlistment objectives to major commands are to be specified by MOS as well as quantity.
- Prior service enlistments are now allowed only in critical skills.
- Selective reenlistment bonuses have been readjusted (affects the soldiers in certain MOSs).

The following additional policy changes became effective 1 January 1982:

- Reclassification is permitted into shortage skills only, subject to medical standards.
- Reenlistment is allowed only in a soldier's present skill or in a shortage skill.
- A soldier must be CPL/SP4 or above to reenlist except for two-year enlistees.
- A soldier must have at least three

area aptitude scores of 95 or more on the Armed Services Vocational Aptitude Battery (ASVAB) that was given before 1 October 1980 or three scores of 85 on the current ASVAB. (This affects all SGT/SP5s and all CPL/SP4s on the promotion list.)

- The PSG/SFC promotion board now selects soldiers by MOS within a career management field. (Affects all SSGs being considered for promotion.)
- Some soldiers will be promoted to SGT/SP5 and SSG to fill MOS needs. (Affects CPL/SP4s and SGT/SP5s in overage MOSs.)
- Promotion opportunities by MOS will be published to encourage voluntary reclassification.

DRILL SERGEANT DUTY

Drill sergeants are a select group of NCOs responsible for developing discipline, motivation, morale, esprit de corps, and professionalism in new soldiers. Because of their influence, only the best qualified professional soldiers should be assigned as drill sergeants.

Soldiers are selected for this duty on the basis of their individual qualifications and their demonstrated potential to handle increasing responsibility. Volunteers must be in the ranks of SGT through PSG/SFC in any MOS.

Applications from volunteers must be submitted through command channels on DA Form 4187, following procedures 3-34, DA Pamphlet 600-8, and must include the following:

- DA Form 705 or 705-R, Army Physical Fitness/Readiness Scorecard, showing successful completion of the Basic Physical Fitness Test or the Army Physical Readiness Test

within the last six months.

• A statement from a medical officer that the applicant does not have a history of emotional instability.

• A copy each of DA Forms 2 and 2-1.

• A list of three training centers in order of preference.

All male soldiers in the rank of SGT/SP5 must meet the following additional qualifications:

• Have a minimum of four years of service.

• Have successfully completed PNCOC/BNCOC or PLC.

• Have been recommended for drill sergeant duty by a commander in the rank of LTC or above.

The soldiers selected for drill sergeant duty will be stabilized for two years at an Army Training Center with the option of requesting an additional 12 months. They also receive special duty assignment pay, a supplemental issue of uniforms with free laundry, and authorization to wear the distinctive drill sergeant hat and badge.

In addition, they will have the pride of accomplishment in doing a difficult and demanding job.

There is a continuing need for highly qualified personnel to serve in these vital duties at Army Training Centers. For more information, soldiers who are interested may contact their local military personnel offices or their career branches.

CLASSIFICATION

Classification, in the "life cycle management" process, relates to a soldier's initial award of an MOS and to any subsequent changes in the MOSs awarded to that soldier. It is a continuing process.

An enlisted soldier's classification begins the day he enters the Army and continues as long as he stays in, keeping pace with his growth in knowledge and experience and with the changing needs of the Army.

Classifying a new soldier is mainly a process of sizing up his human attributes by examining, testing, and categorizing his physical and mental qualities and inquiring into his educational and occupational background and interests. With this information, the Army has a basis for determining what sort of training the soldier is best suited for and how he can be employed most effectively.

Usually a soldier is awarded his first MOS by the training center or service school at which he completes his advanced individual training. An MOS may be awarded when a soldier becomes qualified through formal training or formal on-the-job training or on the basis of skills he has acquired as a civilian.

A soldier is reclassified when his MOS must be withdrawn or changed or when a new primary or secondary MOS is designated.

This redesignation of a primary MOS should be considered carefully at all personnel management levels from the unit commander in the field to the Enlisted Personnel Management Directorate. The primary MOS represents the experience of the soldier and also an investment in time and money by the Army. It is an asset in the Army's inventory of skills, which in turn serves as a basis for determining training requirements, promotion ceilings, and other actions of individual and Army-wide importance.

For these reasons certain restrictions and controls must be imposed in the redesignation of the primary MOS. To that end all reclassification actions are monitored by the Force Management Division of EPMD to ensure that they conform to the grade and MOS management policies and procedures outlined in DA Circular 611-81-4 (Career Management of the Enlisted Force) and Section VII, Chapter 2, AR 600-200.

The Army recognizes that soldiers perform best when they are well motivated, thoroughly understand their tasks, and are satisfied with their performance. It tries to provide each soldier with a sense of the importance of his present job and with a pattern of visible progression toward increasingly higher levels of work that will challenge his initiative and ability. This is accomplished through the Enlisted Personnel Management System (EPMS).

EPMS extends beyond the MOS system and affects all aspects of enlisted personnel management. Its fundamental effect is on the training, evaluation, classification, and promotion features.

Under EPMS, all enlisted career fields have been reshaped to accomplish the following:

- Reflect a modified grade structure that brings authorized grades into line with future feasible assets.
- Consolidate MOSs and merge them at the higher grades, where practical.
- Standardize career management fields having a fixed grade-skill relationship.
- Provide visible and logical patterns for progression to successively higher level jobs.

SRB CHANGES

Soldiers who hold MOSs for which there is no Skill Qualification Test will now take the Common Task SQT (CTSQT).

The CTSQT will cover selected critical tasks that are applicable to all soldiers in Skill Level 4 and below. Included are the critical tasks all soldiers must be able to perform to survive and win on the modern battlefield. Many of them are also included in the MOS-specific SQTs.

Like the other SQTs, the CTSQT is organized into three parts: Skill Component (SC), Hands-On Component (HOC) and Job-Site Component (JSC). The 16 tasks, written by seven different U.S. Army Service Schools, cover such critical areas as com-

munications, map reading, basic weapons, survival techniques, NBC, first aid, and physical fitness.

These tasks have been included in two new field manuals, entitled Soldier's Manuals of Common Tasks. FM 21-2 covers Skill Level 1, and FM 21-3 covers Skill Levels 2, 3, and 4. These manuals were distributed to units worldwide in May 1981.

CTSQT scores will not be used in promotion decisions. Their purpose is to help identify and eliminate common task training deficiencies.

During the first test period (1 December 1981 to 31 August 1982) the CTSQT will cover only the Skill Level 1 tasks in FM 21-2. The soldiers who must take this test should already have copies of their SQT notices and Job Site Components. The notices inform the soldiers of the specific areas they should study in the manual. Those who are not sure they can perform the tasks should get help from their supervisors or check the appropriate references at the end of each task summary in the manual.

Training Standard Officers (TSOs) at units or installations will inform units when the test will be given and which soldiers will take the CTSQT. They will also announce sites and dates before 1 November each year.

Soldiers who are notified that they are scheduled to take the CTSQT should make sure they receive the CTSQT Notice so that they can prepare for the test.

HANDICAPPED DEPENDENTS

Soldiers with physically, emotionally, or intellectually handicapped dependents have a way of letting assignment authorities know about them and their special needs. These soldiers can submit an application requesting recognition of the specific condition and asking that the availability of specialized care be considered in the assignment selection process.

This program does not provide a means for deletion from assignment

or for stabilization in a specific geographical location.

Procedure 4-28, DA Pamphlet 600-8 contains detailed instructions

for submitting an application. The application should contain, at least, a statement outlining the handicap of the dependent, a medical statement

signed by a physician verifying the handicap, or, if appropriate, a statement of the intellectual or educational handicap.

RESERVE COMPONENT NOTES

RESIDENT MOS COURSES

Resident school instruction is often available for enlisted Reservists assigned to MOSs for which they have not been fully trained.

Such formal schooling is especially valuable for Reservists when their unit's designation is changed, or when their units receive new, unfamiliar equipment.

The U.S. Army Formal Schools Catalog (DA Pamphlet 351-4) describes the Army's resident courses.

All applications for attendance must be submitted in accordance with AR 135-200, Active Duty for Training and Annual Training for Individual Members.

For information about class

schedules and space available, commanders should call their respective CONUS training offices.

DRILL SERGEANTS SCHOOL

Army Reservists who want to become drill sergeants are encouraged to apply for one of the drill sergeant courses conducted at Fort Leonard Wood, Missouri; Fort Knox, Kentucky; and five other stateside posts. A new eight-week class reports about every four weeks throughout the year.

Applicants must be in the rank of CPL or higher and must be hard-stripe NCOs. Specialists who have been appointed as acting sergeants by unit orders may also apply.

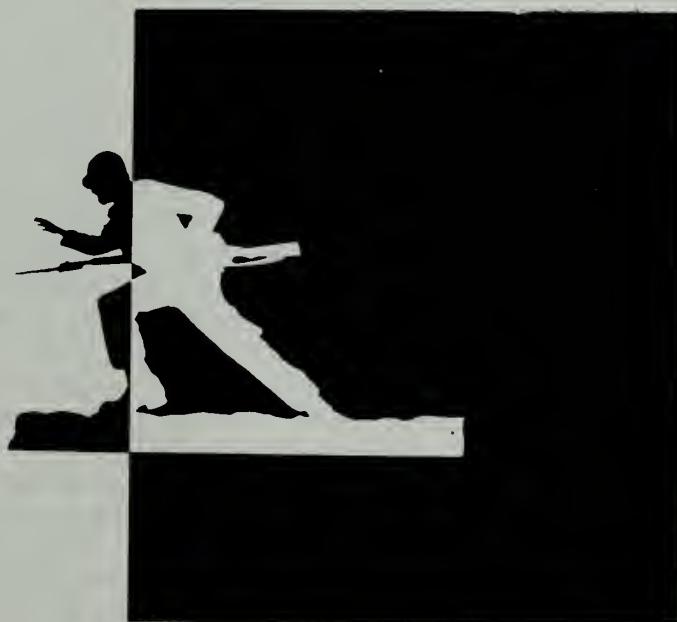
All applicants must be prepared to

pass the three-event physical fitness test upon reporting to drill sergeant school.

In addition to Forts Leonard Wood and Knox, Reservists may take the drill sergeant course at Fort Sill, Oklahoma; Fort Dix, New Jersey; Fort Jackson, South Carolina; Fort Benning, Georgia; and Fort McClellan, Alabama.

Many Army Reserve units, including reception stations and training divisions, have requirements for drill sergeants up to and including the rank of SGM.

For additional details, anyone who is interested should read TRADOC Regulation 350-16 and AR 600-200, or call his major U.S. Army Reserve Command.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

With the new year a new Officer Distribution Plan (ODP) has taken effect. Essentially, it reduces the number of authorized positions in USAREUR and FORSCOM and increases TRADOC requirements. These changes significantly affect the assignment process.

The two items that follow in these notes should help clarify the ODP and the assignment process. Combined with some of the information in our Infantry Branch Newsletter (CY 1982), these items are a way for us to communicate with infantry officers.

We will be working closely with USMA, ROTC, and OCS representatives on initial assignments for our new lieutenants. Additional schooling for them, such as Airborne and Ranger, will also be a primary concern.

Captains will continue to move in and out of the Advanced Course and will begin to attend CAS³ at a more rapid rate, until all captains can attend.

Generally, majors and lieutenant colonels will alternate between their two specialties and continue to attend staff and senior service colleges, respectively.

We hope that our new Infantry Branch Newsletter will help you with your plans for 1982.

COL JAMES A. SULLIVAN

OFFICER DISTRIBUTION PLAN

The total number of officers in the Army, by each grade and specialty, does not match perfectly either the total authorizations (from TOE and TDA documents) or the total positions for any given grade and special-

ty. (There are four grades — captain through colonel — and about 37 specialties, or about 148 combinations of grades and specialties.)

Given these odds and all the other variables involved, a perfect match of grades, specialties, and preferences is unlikely. Even if we could freeze authorizations and count noses it wouldn't help. Because assignments are usually made three to nine months in advance, the match-up has to be made on the projected (estimated) inventory versus the projected authorizations.

The Officer Development Plan (ODP) grew out of the need to get the right number of officers with the right grades and specialties to the places where they are needed the most.

The ODP is essentially a matrix (or several of them) with grades on one axis and specialties on the other. Almost every installation has its own matrix, its own ODP. For example, on Fort Carson's ODP, at the intersection of "captain" and "SC 11," the number 53 appears. This means that the sum of the Infantry captains at Fort Carson, plus those on orders to Fort Carson, minus those on orders to leave Fort Carson, should equal 53, no more and no less.

It is a good idea to note here that a given unit can have many vacant positions (authorizations from TDA and TOE) and still be over its ODP. When a friend tells you his unit needs captains and your assignment officer tells you that unit is overstrength, both are correct. The inventory of officers — by extension, the ODP — does not equal authorizations.

The ODP is developed annually for the coming calendar year (CY). Requirements are the projected needs (by grade and specialty) for all Army elements, primarily the sum of all

projected TDA and TOE positions. The projected officer inventory is another matter.

The challenge for the Officer Personnel Management Directorate (OPMD) is to project, months in advance, all the new officers coming on active duty, plus retirements, resignations, promotions, specialty designations and changes, professional schooling and all the other factors that affect the availability of an officer for assignment in a given grade and specialty.

There is only one way to make this projection — name by name, file by file. Career managers (assignment officers) review each individual's status to confirm his specialties, assignment actions, qualifications, schooling, availability, term of service, and personnel actions. Once this inventory has been completed, each officer can be placed in one of three basic categories:

First, an officer may be deleted from the list and not counted at all because of his expected retirement or release from active duty.

Second, he may be considered available for reassignment. As an example, for the CY 1982 ODP, an officer is considered available for reassignment if he is to complete a tour between 1 January 1982 and 30 September 1983 and has not already been placed on orders.

Why September 1983? Because assignments are made nine months in advance, and by December 1982 some officers will be placed on orders with report dates as far away as the following September.

Generally, officers who are available for reassignment are considered available in either of their specialties; the chief exception is an officer (usually a captain) who is not qualified in his initial specialty. In

this case, he will not be considered available in his additional specialty. Another exception is an officer who is in training (FAO or language) for a particular assignment.

The third category, officers who are not available for reassignment, includes those whose tours will not be completed by the end of September 1983. These officers, working in one of their two specialties, are not considered available for reassignment in their other specialties.

Once each officer is thus categorized, it is possible, through a computer program, to compare the available projected inventory with total projected requirements throughout the world. The officers in the first category are not counted at all. Those in the third category are counted against a requirement that matches their grades and serving specialties. The remaining officers, available for reassignment in either specialty, are matched against the appropriate requirements until the inventory is exhausted.

Again, this is accomplished with a computer program, and it does not always work out perfectly. In some cases officers are "left over" in particular grades and specialties; far more common, though, there will be shortages of officers in several grade and specialty combinations.

The net result of this comparison is called the Asset Utilization Plan (AUP), which reflects, by grade and specialty, the number of officers each branch should be able to provide in each specialty. In total numbers, then, AUP equals ODP, which reflects each major command's share of those officers, again by grade and specialty.

A unit's fill of officers is a reflection of the number of officers in the inventory and the unit's priority. This priority is determined, primarily, from the Department of the Army Master Priority List (DAMPL). One element of the DAMPL reflects personnel priority; this is a number that, when all of a MACOM'S units are consolidated, determines its percentage of fill. Another computer

program converts AUP to ODP in accordance with these priorities.

The process permits selective grade substitutions (for example, using extra lieutenants against shortages at other grades) and ensures that all elements receive a reasonable share of the available officers. This process determines an ODP for each MACOM; the MACOM commanders then sub-allocate officers to their subordinate commands and installations.

At MILPERCEN, the ODP has two main functions. First, the Distribution Division, OPMD, uses it to determine the requisitions that will be "opened," that is, passed to the assignment divisions to be filled; and second, it shows an assignment officer which commands have shortages that he needs to fill.

Because there are never quite enough officers to go around, the ODP is a way of making sure the ones that are available are placed where the Army needs them most.

ASSIGNMENT PROCESS

The Officer Personnel Management Directorate (OPMD) directs the reassignment of Army Promotion List (APL) officers in the ranks of lieutenant through colonel. The OPMD provides the major commands with the officers they need to perform their missions, and the major commands determine the specific duty assignments for the effective employment of these officers.

But the assignment process is rarely simple and straightforward. Each assignment must be carefully considered because of special job prerequisites, such as military education, language ability, additional skill identifiers, security clearance, or because of problems related to the officer and his family.

The following example, although not a typical assignment action, demonstrates in a simple situation the major steps in an assignment process over a two-month assignment cycle.

On 29 December, the personnel

manager for U.S. Army Europe (USAREUR), submits a requisition for a major in specialty code (SC) 41 to replace an Armor officer in the G1 office of a division who is due to leave on normal rotation the following October.

The Distribution Division of OPMD receives the requisition, confirms the loss of the Armor officer, and ensures that USAREUR is projected to be below the ODP for majors in SC 41. Then it validates the request and forwards it to the AG Branch, which controls the assignment of officers in SCs 41, 42, and 43.

The controller at AG Branch reviews the participation of all branches in SC 41 assignments and finds that Infantry Branch is behind in participation and should be given the requirement. By 25 January the responsible assignment officer in Infantry Branch has the requirement.

The assignment officer reviews his management book for available officers in the CONUS sustaining base. This book contains a list of Infantry officers grouped by additional specialty codes and in the order of their dates of availability (DTAV).

After eliminating from consideration all the officers who are not available (those who are either serving overseas, attending a military PCS school, or serving in USMA or ROTC instructor duty during the next academic year), the assignment officer picks out five majors (11/41) whose DTAVs make them the most available for consideration.

In reviewing the Career Management Individual Files (CMIFs) of these officers, the assignment officer compares them in terms of military education level, last overseas tour, last tour with troops, eligibility for promotion, branch immaterial assignments, and personal preferences.

Officers A and B are eliminated from further consideration outright, because MAJ A is locked in to attend CGSC for his next PCS, and MAJ B will probably be selected for promotion by the next board.

MAJ C is available, has not been overseas since 1972, and has been away from the kind of troop opportunity that is available in Europe longer than any of the other officers being considered. But he wants a CONUS assignment, while both MAJs D and E want to get back to Europe.

MAJ E has never served in a branch immaterial assignment (USAREC, ROTC, USMA, USARMR) and should be assigned instead as XO (SC 41) in a district recruiting command. In the end, MAJ D, who is currently assigned to Fort Monroe, gets the assignment to Europe. (MAJ C remains vulnerable for overseas assignment if there are no volunteers. Otherwise, he will be

assigned to CONUS, hopefully to a FORSCOM or TRADOC installation with troop opportunities.)

The next step in the process is for the assignment officer to prepare an assignment worksheet. The appropriate enroute schooling is determined and requested. When the school request is approved and returned several days later, the final assignment worksheet is prepared. The worksheet is then circulated to the SC 41 controller, to the appropriate professional development officers, and to the Infantry Branch Chief for concurrence.

MAJ D's losing command, Fort Monroe, is then alerted by telephone to the proposed assignment action. This alert notification is passed down

the chain of command to MAJ D. Seventy-two hours after the losing command receives the alert, and not later than the end of February, a Request for Orders (RFO) is transmitted by MILPERCEN, unless either the losing command or MAJ D responds to the alert with a request for reconsideration of the assignment. The losing command publishes orders for MAJ D on the basis of the information in the RFO.

When these orders are issued for MAJ D, the personnel people at Fort Monroe adjust their projected strength to show themselves short one major in October. Fort Monroe then submits a requisition to MILPERCEN by 1 April for a major in SC 11, and the process starts over again.

RESERVE COMPONENT NOTES

CGSC WRITING REQUIREMENT

Officers who are now beginning their Command and General Staff College education through correspondence studies or through U.S. Army Reserve Schools will find their writing requirement doubled.

Before the 1981-82 school year, officers were required to write one 750- to 1,000-word paper on a military subject. In line with the Army's renewed emphasis on writing skills, this requirement has been expanded to include a 500- to 750-word argumentative paper plus a 1,000- to 1,500-word staff paper. This change parallels a revision in the resident CGSC course.

Exempt from the new requirement are students who are already enrolled in Phases III and V of the CGSC with USAR Schools and those who have already passed the writing requirement through correspondence courses.

Phase I students must submit the argumentative paper by 31 May 1982. Because about one student in five fails the first effort, students actually have until 1 October 1982 to pass the requirement.

For students enrolling now, the second paper — the staff paper — will have to be successfully completed by 1 October 1983 so that they can continue into Phase V of the course.

Even with a second submission, not all students succeed. Last year, 131 students were dropped from the course for failure to meet the earlier one-paper requirement.

CAS³ AND CGSC

Reserve officers will no longer receive Command and General Staff College equivalent credit for education and promotion purposes by completing the Combined Arms and Service Staff School (CAS³) course.

The change rescinds the earlier policy that the CAS³ be considered the full educational equivalent of the CGSC.

The change will have little effect on the Reserve officer educational system. The Reserve officers who have completed CAS³ will be granted CGSC equivalency for promotion purposes.

For most Reserve officers, the completion of CGSC is still required

for promotion to colonel, and the completion of half the course is required for promotion to lieutenant colonel.

OER RATING CHAIN

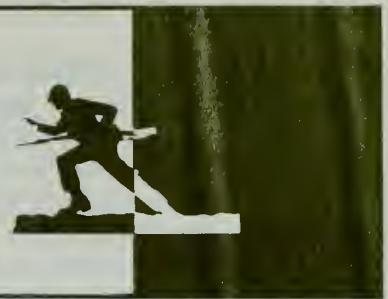
The Officer Evaluation Reporting (OER) System rating chain for all officers now corresponds to their chain of command, even when the chain contains a mixture of Active and Reserve Component officers.

This eliminates a previous rule that required active duty officers to be rating officials for many Active Component officers serving in USAR units.

As an example of how the new policy works, an Active Component officer serving as a platoon leader with a USAR company could be rated by his Reserve company commander with the Reserve battalion commander serving as his senior rater.

Or, a USAR officer serving in an Active Guard Reserve status on the Department of the Army staff would normally be rated by an Active Component branch chief, while an Active Component division chief would be the senior rater.

BOOK REVIEWS



The Battery Press of Nashville, Tennessee, again has sent us a number of its reprints, each of which has been done in the Press's usual fine manner. Each is worth your attention. The latest reprint offerings are: **OUT OF THE BLUE: U.S. ARMY AIRBORNE OPERATIONS IN WORLD WAR II**, by James A. Huston (Originally published in 1972. 1981. 327 Pages. \$19.95); **THE FIRST SPECIAL SERVICE FORCE: A WAR HISTORY OF THE NORTH AMERICANS, 1942-1944**, by Robert D. Burhans (Originally published in 1947. 1981. 376 Pages. \$22.00); **THE 27th INFANTRY DIVISION IN WORLD WAR II**, by Edmund G. Love (Originally published in 1949. 1981. 677 Pages); and **THE DEADEYES: THE STORY OF THE 96th INFANTRY DIVISION**, by Orlando R. Davidson, *et. al.* (Originally published in 1947. 1981. 310 Pages).

The Press has also issued the third volume in its elite unit series: **PROVIDENCE THEIR GUIDE: A PERSONAL ACCOUNT OF THE LONG RANGE DESERT GROUP, 1940-45**, by D. L. Lloyd Owen (1981. 238 Pages. \$19.50), an interesting account of a particular kind of unit doing particular kinds of jobs in North Africa from June 1940 to April 1943 and on the European mainland from May 1943 to May 1945.

Here are a number of other useful and interesting books:

MECHANIZED INFANTRY, by Richard Simpkin (Pergamon Press, 1980. 134 Pages. \$26.00), and **A PERSPECTIVE ON INFANTRY**, by John A. English (Praeger, 1981. 346 Pages. \$29.95). Is there a need for infantry in a modern military establishment? Has the infantryman become obsolete? If there is a need for infantry, what form should modern infan-

try units take and what kinds of individuals should be in those units?

These are but a few of the questions addressed by the two authors mentioned above, one (Simpkin) a retired British Army Brigadier and a long-serving tank officer, the other (English) a serving member of the Canadian Defense Forces and an infantry officer in Princess Patricia's Canadian Light Infantry.

Simpkin's book is the more difficult to read and understand, but it seems safe to say he believes there will be little use for the infantryman on the modern battlefield unless that worthy is mounted in a vehicle that closely resembles the main battle tank; in fact, he thinks the primary infantry vehicle should be based on the main battle tank and should afford the infantryman the same kind of protection. He also argues that the infantryman should be a member of the armor community. In many respects, his words echo those of J.F.C. Fuller who, in the 1920s and 1930s, argued for an "all-tank" force.

English, on the other hand, does not doubt that there will always be an infantry and that it will remain "the basic fighting arm in the combat zone." He feels, too, that the "current tactical emphasis on energy-consuming mobile armored warfare in Europe may be as misplaced as the attention focused on mobile cavalry operations prior to the Great War."

English calls for more and better individual small-unit training for the infantry, for placing more emphasis on maneuver, for teaching infantrymen "how to think rather than what to think," for developing "lean and hard-marching" soldiers, and for "the critical reading of the lessons of past wars."

These are two books that everyone

in today's infantry community should get hold of, read, and study carefully.

VIETNAM ORDER OF BATTLE, by Shelby L. Stanton (U.S. News Books, 1981. 396 Pages. \$49.95). This is truly an outstanding reference book, one of the finest yet produced on the war in Vietnam, and one that is going to have to be used by anyone studying the activities of the U.S. Army and Allied ground forces in Vietnam between 1961 and 1973.

Stanton put in six years in Vietnam as an infantry officer in a variety of assignments. In this book, which is organized as a true order of battle, he explains the general Army command structure in Vietnam, unit deployments and stations, their weapons and equipment, their insignia, a chronology of their combat operations, and their functions and missions.

The book is filled with photographs, line drawings, tables, and maps, and contains several appendices, one of which lists U.S. casualties by various categories. This is one of those publications we cannot recommend too highly.

SO PROUDLY WE HAIL: THE HISTORY OF THE UNITED STATES FLAG, by William Rea Furlong and Byron McCandless, with the editorial assistance of Harold D. Langley (Smithsonian Institution Press Book, 1981. 260 Pages. \$22.50). Everything you wanted to know about our country's flag — its development over the years, its various designs and colorations, and its predecessors — is in this book. Filled with illustrations of various kinds and color reproductions, it is the best we have seen on the subject. Here is another of those reference books that is far more important than its title indicates.

FOLLOW ME: THE HUMAN

ELEMENTS IN LEADERSHIP, by Major General Aubrey S. Newman, US Army, Retired (Presidio Press, 1981. 323 Pages. \$14.95). This collection of leadership vignettes includes some of the author's "Forward Edge" columns from ARMY Magazine. Its appearance is well-timed because it comes in an era when management techniques seem to have replaced basic leadership terms and human motivators.

General Newman takes the reader through his colorful Army career, which spanned 40 years from his graduation from the Military Academy in 1921 until his retirement as Chief of Staff of the Continental Army Command (CONARC) in the pre-Vietnam period.

All his tales provide practical lessons that are timeless. He deals in a candid and common sense manner with such real issues as alcoholism, integrity, peer pressure, and bootlicking. He offers no "school solution" to the current infantry leader's problems, but merely relates what was successful for him. But he presents the lessons learned so simply and directly that they are at once convincing and applicable in similar situations.

For the infantry buff, General Newman's book should bring added interest as he spins each yarn into a khaki fabric that is warm, human, and even funny in parts. He has succeeded in writing a "how to lead" manual that is an excellent leadership primer for today's infantryman, who must wrestle at times with other "how to" publications.

EISENHOWER'S LIEUTENANTS: THE CAMPAIGN FOR FRANCE AND GERMANY, 1944-1945, by Russell F. Weigley (Indiana University Press, 1981. \$22.50). Reviewed by Major Thomas J. Waraska, Headquarters TRADOC.

This is an excellent one-volume history of the American Army's campaign in Europe. The generals' and the Army's preparations for the amphibious assault into and the movement across western Europe are analyzed in a fast-paced and readable

commentary. General Eisenhower is the hub of this book in which his subordinate generals and their actions are critically evaluated.

Such generals as George S. Patton, Jr., Omar Bradley, Courtney Hodges, Jacob Devers, and the British Army leader, Bernard Montgomery, emerge from this book in a different light than usual. They are pictured as overly conservative, methodical, and predictable. U.S. infantry units are often criticized for their poor performance, especially in closing with the enemy. The author, a professor of history at Temple University and well known throughout the military history profession, also believes that some of the subordinate American generals — Ridgway, Gavin, Gerow, Middleton, and J. Lawton Collins — were more capable and aggressive than their seniors.

The campaigns from Normandy to the Elbe River are covered in appropriate detail, and Weigley selectively highlights a number of excellent small-unit actions. Although the details may be considered excessive for some of the actions, they do serve to emphasize the role of individual soldiers in the subsequent victories.

Weigley does feel that the American units performed reasonably well, but he also feels that their pace of advance across Europe was not fast enough and that a daring thrust might have ended the war more quickly. Although the British Army escapes his harshest criticism, it is cited for its failure to open the Antwerp estuaries, thereby creating for the northern group of armies some serious supply problems.

This is a solid book. Weigley's analysis is informative, well documented, and thought provoking. Anyone who enjoys good military history should add this book to his library.

WILLIAM ORLANDO DARBY: A MILITARY BIOGRAPHY, By Michael J. King (Shoe String Press, 1981. 219 Pages). Reviewed by Captain Harold E. Raugh, Jr., Fort Benning, Georgia.

Commissioned from West Point in 1933, William O. Darby served in routine field artillery assignments until the United States entered World War II. His subsequent meteoric rise in rank paralleled the evolution of the Ranger battalions, units formed early in 1942 and patterned after the British Commandos.

Darby was among the first American soldiers to go overseas and he served initially as aide to the commanding general of the Army's Northern Ireland Force. From this position, Darby secured command of the embryonic 1st Ranger Battalion and was promoted from captain to lieutenant-colonel in less than ten weeks. He led the battalion in the invasions of North Africa, Sicily, and Anzio, and in all of the conventional fighting in between. He earned two Distinguished Service Crosses, a Silver Star, and two Purple Hearts.

A dynamic and courageous leader, Darby twice refused promotion to colonel because he would have had to leave his beloved Rangers. Eventually, the battalion was expanded into a regiment-sized Ranger Force, which consisted of the 1st, 3d, and 4th Ranger Battalions, but it was not authorized a force headquarters until much later.

In trying to break out of the Anzio beachhead in 1944, the 3d and 4th Ranger Battalions were decimated by the Germans at Cisterna, and only 6 out of 767 Rangers returned to friendly lines; the others were either killed or captured.

Shortly thereafter, Darby took command of the battered 179th Infantry Regiment of the 45th Infantry Division and led it for two months before being called to Washington. He returned to Europe in early 1945 and talked his way into the assistant division commander's position in the 10th Mountain Division in Italy. He was mortally wounded on 30 April 1945, just one week before the war ended in that country. On that same day, Darby's name appeared on a list of nominees for promotion to brigadier general. Shortly afterward, he was promoted posthumously, the on-

ly Army officer promoted in that manner to flag rank during the war.

Michael King, author, has served in Ranger units and also as visiting associate professor of military history at the Army's Command and General Staff College. His research for this volume has been quite extensive, and the actions of the Ranger battalions and related units are chronicled in accurate detail. King does make one obvious mistake, though, when he refers to Terry Allen as a lieutenant general; Allen was a major general.

This book is highly recommended to the student of elite units and to those who favor biographies of combat commanders.

THE MILITARY-NAVAL ENCYCLOPEDIA OF RUSSIA AND THE SOVIET UNION: VOLUME 3, edited by David R. Jones (Academic International Press, 1981. 247 Pages. \$31.00). Reviewed by Alexander S. Birkos, Mount Shasta, California.

In this volume the reader will find 63 entries, practically all devoted to naval subjects. He will also find the errata to Volume 2.

David Jones continues his notable attention to clear writing and great detail in each article. There is not only anecdotal material but also an exhaustive treatment of the historical development of Russian shipbuilding on the Baltic. This volume clearly points up the fact that the Russians long have had a strong urge to build a large and modern sea-going fleet. Thus, the current Soviet naval buildup, which has been a source of concern to the West, is not really a startling development but a continuation of policies that were pursued long before 1917.

Professional officers who want to undertake research on Russia's armed forces or defense policies will find this encyclopedia an indispensable reference tool. Aside from the abundance of information in each article, the bibliographies at the end of each entry are in themselves invaluable time-saving guides to sources for further study.

BRINGING UP THE REAR, by S.L.A. Marshall (Presidio Press,

1979. 310 Pages. \$12.95). Reviewed by Colonel Robert G. Clarke, Office of the Joint Chiefs of Staff.

S.L.A. Marshall's association with the United States Army covered almost half a century and included World War I, World War II, the Korean War, the Mid-East crises, and Vietnam. He was a true citizen-soldier who answered his country's call to duty time and time again.

This is a delightful memoir in which Marshall, who died before the book was completed, gives his readers a behind-the-scenes look at some of the major political and military events of his times. It is well structured and reads easily in the true Marshall style. Modesty was never one of Marshall's strong traits, but this only insures that the reader will be told some stimulating tales of how Marshall fought his battles and won more than he lost.

Marshall was our most prolific military writer and his efforts through the years helped shape and influence the Army. Especially strong was his influence on the infantry.

The Army lost a true friend when S.L.A. Marshall died, but his writings will continue to pay tribute to him so long as soldiers fight and armies march.

DIE SCHLACHT UM MOSKAU, by Janusz Piekalkiewicz (Luebbe Verlag, 1981. 288 Pages. DM 48.) Reviewed by Colonel Wolfgang Gerhardt, German Army.

In July 1941, Hitler attacked the Soviet Union. By December, the Germans were in the suburbs of Moscow. This book describes that famous battle in its day-by-day events and shows what it looked like to soldiers on both sides of the lines. The author's narrative is supported by photographs, many of which have never before been published.

The author, of Polish descent but now living in West Germany, has written a number of other works on World War II operations. This book is filled with individual battle scenes, with stories of suspense, and with tales of tragic events. His story is dramatic, yet realistic. The German

offensive literally froze stiff and came to a dead stop in the Russian winter.

The book also contains organizational charts, maps, weapon diagrams, individual action reports, and a well-rounded bibliographic note. It is highly recommended not only to military historians but to young officers and noncommissioned officers as well. It is hoped that the author will find an English-language publishing house so that the dramatic events he narrates can become known to a non-German reading audience.

SECOND FRONT NOW, 1943, by Walter Scott Dunn, Jr. (University of Alabama Press, 1980. 318 Pages. \$21.50), and **1943: THE VICTORY THAT NEVER WAS,** by John Grigg (Hill and Wang, 1980. 254 Pages. \$12.50).

Both writers, one American (Dunn), the other British (Grigg) advance the same thesis: The military forces of the United States and Great Britain could have landed successfully in northwest Europe in 1943, a year before they did. Dunn, in fact, feels that an Allied invasion in 1943 would have met far less German resistance. Like Grigg, he feels the final decision was a political one.

Dunn stays mainly with the military aspects of the whole business while Grigg concentrates his attention on the political and grand strategy aspects as well as on the campaigns that were conducted in 1943. Both do admit that the war in the Pacific had some effect on the American effort.

Was an Allied cross-Channel attack in 1943 possible? These authors say yes, if certain things had been done differently. So the reader must make up his own mind. As he reads the books, though, he must remember the assumptions.

MALIGNED GENERAL: A BIOGRAPHY OF THOMAS S. JESUP, by Chester L. Kieffer (Presidio Press, 1979. 376 Pages. \$16.95). Reviewed by Captain Michael E. Long, Fort Benning, Georgia.

The United States Army suffered a number of growing pains during its early years, particularly in the period

between the end of the War of 1812 and the outbreak of the Civil War. As the author puts it: "Not only did the service lack proper organization, training and discipline, but it displayed other serious deficiencies. Political consideration rather than merit was often the basis for the appointment and promotion of officers. The contract system of supplying troops was inefficient and haphazard primarily because contractors were not subject to military control. The Quartermaster Department, the principal supply agency of the Army, was also in a state of confusion and disorganization."

This crisis-managed environment set the stage for the arrival of General Thomas Sydney Jesup, whose biography has been carefully documented by Chester Kieffer, a retired Army historian. Kieffer describes Jesup's military career in meticulous detail, and describes him as "one who was loyal to his many friends with his personal life beyond reproach."

Although many historians consider Jesup a secondary figure in American military history, he was the soldier Secretary of War John C. Calhoun called on to reorganize the Quartermaster Department and to put it on a businesslike basis. The system Jesup set up made each individual accountable for his own acts and made it mandatory for those who received money or property to account for it properly.

Jesup also served as a field commander during the Seminole War in the 1830s and was accused of violating the white flag of surrender when his troops captured the Seminole leader, Osceola.

Kieffer has made extensive use of

the Jesup family papers to bring out the good qualities of a military man he thinks has been badly maligned. It is a worthy addition to the military historian's bookshelf.

THE POLITICAL INFLUENCE OF THE MILITARY: A COMPARATIVE READER, edited by Amos Perlmutter and Valerie Plave Bennett (Yale University Press, 1980. 508 Pages. \$10.95, Paperbound) Reviewed by Doctor Joe P. Dunn, Converse College.

Amos Perlmutter's *The Military and Politics in Modern Times* (1977) is one of the more significant texts in civilian-military relations. Written primarily to support the above text, the compendium under review is the first comprehensive reader in this field.

The 59 selections are grouped under three headings consistent with the three major models analyzed in the text: the professional soldier, the praetorian army and the praetorian state, and the revolutionary professional soldier. Each section has an excellent introduction that develops themes and historiography. The excerpts, which include works by the classic scholars in the field, are well chosen both in quality and balance. Unfortunately, as is typical of such readers, the selections are so truncated that the individual articles lose much of their effectiveness.

This book will probably be well received in advanced courses in military sociology and civilian-military relations and, in some cases, international or developmental politics. But this is not a book for the general reader. Its effects will be felt within a small circle of academia but will not reach far beyond that.

RECENT AND RECOMMENDED

WARPLANES OF THE WORLD, 1918-1939. By Michael J.H. Taylor. Scribner's, 1981. \$17.95.

B-57 CANBERRA AT WAR, 1964-1972. By Robert C. Mikesh. Scribner's, 1981. \$17.95.

STUKA AT WAR. By Peter C. Smith. Scribner's, 1981. \$19.95.

NATIONAL SECURITY POLICY FOR THE 1980s. Edited by Robert L. Pfaltzgraff, Jr. The Annals of the American Academy of Political and Social Science, Volume 457, September 1981. Sage Publications, 1981. 237 Pages. \$7.00, Soft Cover.

INTELLIGENCE REQUIREMENTS FOR THE 1980s: COVERT ACTION. Edited by Ray Godson. National Strategy Information Center, 1981. 243 Pages. \$7.50, Soft Cover.

HOW TO BECOME A SUCCESSFUL FREELANCE WRITER: A PRACTICAL GUIDE TO GETTING PUBLISHED. By Jordan K. Young. Moonstone Press, PO Box 661, Anaheim, California 92805, 1981. 121 Pages. \$9.95, Soft Cover.

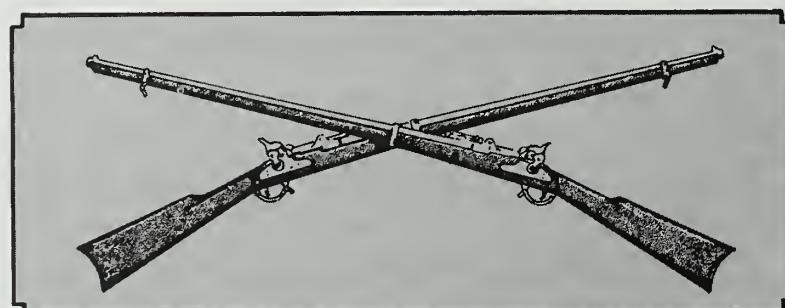
WATCH-WORD!!! A GLOSSARY OF GOBBLEDYGOOK, CLICHES, AND SOLECISMS. By Argus John Tresidder. Published by the Marine Corps Association, Quantico, Virginia, 1981. 110 Pages. \$2.50, Soft Cover.

ESCORT TO BERLIN: THE 4th FIGHTER GROUP IN WORLD WAR II. By Garry L. Fry and Jeffrey L. Ethell. Arco Publishing, 1980. 226 Pages. \$16.95.

EAGLES OF MITSUBISHI: THE STORY OF THE ZERO FIGHTER. By Jiro Horikoshi. Translated by Shojiro Shindo and Harold N. Wantiez. University of Washington Press, 1981. 160 Pages. \$18.95.

SOVIET NAVAL DEVELOPMENTS. Second Edition. Foreword by Norman Polmar. The Nautical and Aviation Publishing Company of America, 1981. 138 Pages. \$14.95.

USAAF AT WAR IN THE PACIFIC. By David Mondey and Lewis Nalls. Scribner's, 1981. \$22.50.



INFANTRY LETTERS

49



Letters

MC1-1 PARACHUTE

Dear Sir,

I read "The MC-1 Parachute," by Lieutenant Charles T. Payne, in your November-December 1981 issue (page 9) and take exception to the assertion that 82d Airborne Division troopers are being subjected to an "unnecessary danger" by jumping the MC-1 (which should read "MC1-1") parachute. I would like to clarify some misconceptions created by the article.

First of all, the article leaves the impression that the 82d Airborne Division is eliminating all of its T-10s and replacing them with MC1-1s. This is not the case. The Division, which recognizes the advantages and disadvantages of each type of parachute, presently maintains a mix of sixty-five percent MC1-1s and thirty-five percent T-10s.

Second, Lieutenant Payne failed to explain that the Division uses the two types of parachutes for different operations. Since my return to the Division in January 1981, the policy has been that T-10s are used for mass tactical exercises using the mass exit techniques (jumpers exiting both jump doors) while MC1-1s are restricted to use for airborne training with single door exit procedures (SDEP). It is true that if mass exit techniques are used by troopers jumping the MC1-1 the risk of high altitude entanglement is higher than with the T-10.

This problem has been eliminated in training by the XVIII Airborne Corps' adoption of SDEP. With the termination of the "traffic cop" or Controlled Alternating Parachute Exit System (CAPES), SDEP allows for complete simulation of combat during training while still providing jumpers with a way to control their

flight and landing. Its only drawback is that by restricting jumpers to exiting only one door at a time, it usually requires a second pass over the drop zone to exit all jumpers, thereby delaying tactical assembly.

As for parachute landing fall (PLF) injuries, the T-10 is far from the proven best choice. In fact, a three-year Division historical analysis has revealed that the injury rate for jumping the T-10 is three times as high as that for the MC1-1. While the jumper has trouble changing his facing or direction of drift with the T-10, the MC1-1 allows him to select a landing area and choose the type of PLF he will execute. Since the MC1-1 provides eight knots of forward thrust, and since the average daily wind speed is about five knots, the resulting landing is usually forward or to the side, a landing much preferred over the random PLFs that result from jumping the T-10. In higher than normal winds (9-13 knots) the PLF injury rate is more than five times as high for T-10s as for MC1-1s. Since the vast majority of injuries that do occur result from PLFs, the small increase in entanglement injuries with the MC1-1 is easily offset by a substantial reduction in PLF injuries.

Of course, there is the occasional careless jumper and the uncertain new trooper, both of whom are prone to make mistakes. The former can be corrected by proper leadership, the latter by training and, as with any new job or piece of equipment, experience. In fact, the basic airborne school at Fort Benning, Georgia, presently conducts three of the five jumps needed to qualify parachutists with the MC1-1.

There is a funny thing about the few guys I have met who express concern about the MC1-1. Their personal

preference for a parachute to jump themselves is almost always the MC1-1.

Perhaps Lieutenant Payne's several misconceptions result from his absence from the Division since the many changes, but in any case a correction is appropriate to set the record straight.

CLYDE M. LEAVELLE
CPT, Air Defense
Fort Bragg, North Carolina

DESERT OPERATIONS

Dear Sir,

We read the last two articles in your desert operations series with great interest. (See INFANTRY, July-August, September-October, and November-December 1981.) From our experiences and travels while attending the Israeli Defense Forces Armored Corps Advanced Course, the information is good. There are, however, some additional hints and techniques that might help those who work in a desert environment.

The second article of the series contains a pertinent discussion of trafficability in the desert. It might, however, restrict the commander's imagination in planning should he use the description of the restrictions in conjunction with a hasty terrain analysis. Our experience has shown us that trafficability maps, used with standard topographical maps, provide an excellent means by which to plan maneuver. The trafficability maps, which are based upon a medium tank's characteristics, give a quick and usually accurate description of the terrain to be traversed in an easily read color code.

The applicability of proper terrain

analysis in the desert can be illustrated by the successful German maneuver around the British flank in Cyrenaica in 1941 and by the Israeli maneuver against the Egyptians in the Sinai in 1973. In each of these cases the defender considered the terrain on one or both flanks untrafficable. No detailed reconnaissance was conducted to validate the assumption. The attacker, through proper terrain analysis and reconnaissance, found routes through or around the defender, forcing a collapse in the continuity of the defense.

The Israelis place great emphasis on terrain analysis. In their doctrine no terrain is considered totally untrafficable. For this reason they always allocate forces to isolate the cross compartments formed by difficult desert terrain.

At times, given the difficulty of movement caused by cross compartments and poor trafficability, the terms *front*, *flank*, and *rear* have little meaning in a major battle. The proper analysis of desert terrain and the use of all available aids such as trafficability maps and air photo analysis will help an outnumbered force to succeed.

Camouflage, as a passive measure against air attack, is indispensable. Evasive action, coupled with the ability to conduct camouflage drills quickly, can provide a successful defense against attack by high performance aircraft.

Navigation in the desert, as anywhere else, requires practice. Desert navigation in the Mid Eastern/North African areas is aided by native wells, which should be marked on 1:50,000 maps or located on aerial photos. The wells, dug into the desert floor, are easily recognizable at a distance by a discoloration around their openings. The different sand, soil, and rock composition beneath the surface provides a clue to the existence of such a hole.

Aerial photos and stereoscopes are also useful in determining routes recently travelled. Wadi crossing sites are generally recognizable by their well-worn entrance and exit sites. The

use of stereoscopes on air photo strips are also helpful in determining the relative depth of wadis that must be crossed and the suitability of established crossing sites.

WAYNE J. SABO
CPT, Infantry
EDWIN L. KENNEDY
CPT, Infantry
Fort Benning, Georgia

AIMING STAKES

Dear Sir,

Training the modern infantryman is a continuing process, and quite often we pick up little techniques that enable us to do our job that much better. I would like to share one of those techniques with INFANTRY's readers.

While conducting a live fire defense at night, I found that my company had some problems with rounds being fired high and even out of sector. Why hadn't we checked our positions to make sure each man knew his sector of fire? Believe me, we had. Not only was each position checked, but I made sure that each man had aiming stakes. When the problems appeared, I realized that the aiming stakes were the cause. I should say it was the way they were being used that was the cause.

Eventually, we thought of a way to keep our soldiers firing in sector and maintaining low grazing fire. We came up with a low level firing device that we consider quite effective.

As with regular aiming stakes, we found that one stick for the left limit and one stick for the right limit was not enough. It was still too easy to traverse left or right out of sector. So we decided to use two sticks for the right limit and another two for the left limit to insure that our soldiers kept their fire in their sector.

We placed one stick near the barrel and the second back by the stock. When the rifleman had his weapon against both sticks he was on his left or right limit.

With sturdy sticks this system

worked quite well for staying in sector, but a soldier with little or no illumination at night still tended to raise the muzzle of his weapon and fire high.

To solve the problem, we took a piece of WD1 communications wire (twine or rope will also work) and tied it around the left front aiming stake. Then a rifleman had his partner walk forward of their position to determine any dead space and to find a waist high aiming point where he could get effective grazing fire. The wire was then stretched tightly to touch the top of the barrel and tied securely to the right front aiming stake. (The line must be tight!)

Now when it gets dark, our soldiers can fire within their sectors and if they start to elevate their rifle barrels they will feel resistance and this will let them put out good effective grazing fire. At any time, the firers can still pull their weapons out and move to their alternate or supplementary positions.

This method worked for us and I hope it works for others as well.

WILLIAM J. MARTINEZ
CPT, Infantry
Co C, 2d Bn, 504th Infantry
Fort Bragg, North Carolina

LEADERSHIP, NOT MACHINERY

Dear Sir,

The article "ITV and IFV Transition," by Captain Robert L. Maginnis in the November-December 1981 issue of INFANTRY (page 18) provides significant information that should be of concern to the professional infantryman. The author's thoughts on cross-training, maintenance, logistics, and leader training are commendable. However, I find great dissatisfaction with his statement that "the introduction of the IFV should give the infantryman that same esprit de corps that long has been associated with armor and cavalry units."

Leadership is the key to esprit de

corps, not machinery. His statement tends to make one think the infantry has no esprit de corps.

His position that the IFV crewman will at last fight from his vehicle raises a common fear among armor and infantry leaders. We should never forget that our primary mission is to close with and destroy the enemy. We cannot perform this mission while moving rapidly across a battlefield buttoned up. History has proved that armor can be defeated by dismounted infantry unless other dismounted infantry is available to properly clear the area. We need not relearn this lesson by seeing IFVs burning next to M-1 tanks.

A final argument: If we allow entire infantry squads to be referred to as "crews," we will ultimately have just that — IFV crews of eight soldiers instead of squads of eleven. There will be one driver, one gunner, and six port firers.

This may seem ludicrous, but when the pendulum swings away from the military, the budget choppers can dream up many ludicrous ways to save money.

GARY H. CAVENDER
CPT, Infantry

ARNG MOS TRAINING

Dear Sir,

I am concerned that, with the MOS qualification structure it has now, the Army National Guard would not be ready to fight in a "come as you are" war, especially in regard to its prior service personnel.

Under the Guard's present policy, enlisted personnel with active Federal service of 12 weeks or more are exempt from Initial Active Duty Training (IADT). This includes about 100,000 of the Guard's 316,000 enlisted personnel.

Even for those who do attend IADT, few MOS-producing schools qualify them in all the tasks they must perform to be MOS qualified. This training then becomes the responsibility of their unit commanders, and it is possible, therefore, that 32 percent of all ARNG enlisted men would have to be declared not MOS qualified.

Presently the method of qualification prescribed by ARNG regulations for qualification at unit level is on-the-job experience (OJE). This OJE is obtained through various combinations of unit training assemblies and annual training. The unit commander can use OJE as a means of determin-

ing MOS or a time factor (completion of AT) or both.

But the problem is that OJE is defined as an unstructured and unsupervised routine performance of duty (experience) that will give the soldier enough experience to enable him to perform the duties of an MOS satisfactorily and, subsequently, to be awarded the MOS. The individual soldier is held responsible for satisfying the requirement of OJE during his monthly training periods. This means that a soldier has to be assertive if he is going to develop and attain his MOS that way. As a commander of four companies, I have found that assertive people are a small minority. Besides, a National Guard unit has only 39 training days in which to perform the subjects required by regulation and by higher headquarters, and this does not give the individual Guardman much time to train on his own for an MOS.

The unstructured OJE is also a contravention of the concept outlined in the Army's Battalion Training Management System (BTMS). BTMS uses tasks, conditions, and standards to measure the soldier's ability to perform in his MOS in a structured program using Job Books and Soldier's Manuals to guide the development of

Infantry

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each soldier in his MOS.

A structured on-the-job training program would be more in line with this BTMS concept, and the Guard could develop such a program for its prior service personnel using the Trainer's Guide for a list of Soldier's Manual skill level tasks for an MOS; the training objectives from FM 21-1, Soldier's Manual of Common Tasks; and the appropriate Soldier's Manuals for specific MOSs. The Job Book tasks could then be annotated for each MOS, taking into consideration the unit's mission and equipment.

This on-the-job MOS training program would be defined as structured and supervised training in the routine performance of a soldier's duty, which would provide him with enough task experience for the award of an MOS.

The service schools could then be tasked either to designate the Trainer's Guides as MOS qualification task lists, or to develop them separately. This development would have to take into consideration unit mission and equipment, as Guard units do not have the same equipment that an Active Army unit has. This

would lift from each unit commander the administrative burden of having to develop a qualification program for each MOS in his unit. Too, the task list would standardize the MOS qualification program throughout the U.S. Army.

I believe that with such a program, and through the attention and guidance that would go along with it, the Army's National Guard soldier would be a more productive part of the Total Force.

CLIFFORD D. BAKER
MAJ, Infantry
Tacoma, Washington

M16 RIFLE ARGUMENT

Dear Sir,

In Art Osborne's article on the M16 rifle (INFANTRY, September-October 1981), we are again bombarded with a great deal of verbiage praising that rifle when, in fact, what the author is really saying is that the 5.56mm is a good military cartridge. The fact remains that the M16 rifle — even after numerous improvements — is a very poor military rifle. It

breaks easily and jams readily.

If one accepts the argument for the 5.56mm cartridge, I submit that there are rifles in that caliber that are superior, the AR-180 or the Ruger Mini-M14, for example.

THOMAS G. EMBRY
St. Johns, Missouri

BOOKS WANTED

Dear Sir,

I am doing research on the military operations of the Vietnam war, particularly at the tactical level, and would like to obtain copies of your publications *Infantry in Vietnam* and its successor, *A Distant Challenge*.

I understand that both of these books are out of print, but am hoping that among your readers there is someone who has one or both and would be willing to sell them to me. If so, I would greatly appreciate it.

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From The Editor

AUTHORS! AUTHORS!

Each year, INFANTRY provides an opportunity for about 75 authors to have their articles read by more than 50,000 readers. In most cases, these articles are the writer's first published works. More than 100 letters to the editor also make their way into print each year, and these, too, provide an outlet through which our readers can respond to the articles or express their professional opinions on other subjects.

This dialogue forms an excellent worldwide communication system that brings all Infantrymen "into the net." (Bet you didn't know that INFANTRY is mailed to 722 foreign subscribers in 52 countries!) Every Infantry unit in the Army (Active, Reserve, and National Guard) and every Senior ROTC detachment also receives INFANTRY.

As the Army's second oldest periodical, we are always happy to receive both articles and letters from professional Infantrymen around the world. Your opinion is important and your expertise is vital to a more efficient combined arms team.

Keep those cards and letters coming!

DRK

BOOTS

*Infantry
Is still the Queen of Battle.
Still she sends her soldiers
Pounding in on foot.*

*A footslogger's feet are as vital to him
as the rifle he carries.*

*He cares for them both with equal
devotion,
Which, perhaps,
Is why
A dead soldier's boots
Draped out of a chopper
With the toes turned out
Is the saddest sight of all.*

(by Charles Lotter)

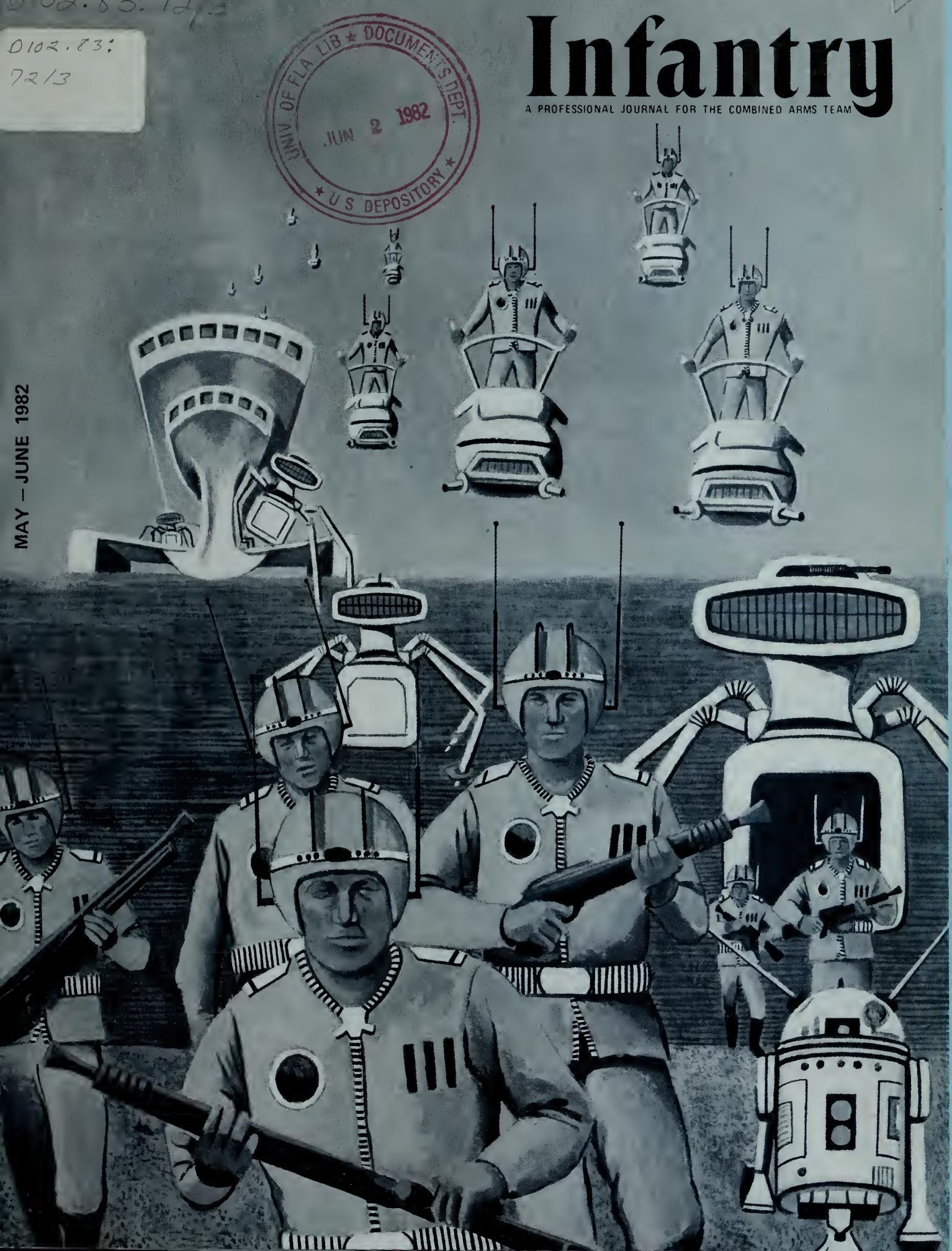
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ARTICLES

20 RANGERS AND RECON MARINES

Captain Walter F. McTernan III

23 SUSTAINMENT TRAINING: AN IDEA WHOSE TIME HAS COME

A Soldier

30 ONE-ON-ONE TRAINING

Jerry D. Freeble, Jr.

David L. Hannaman

Robert H. Sulzen

FORUM AND FEATURES

8 AMPHIBIOUS WARFARE SCHOOL

Captain Ernest W. Cooler III

9 ANGLICO

Major William R. Jones

11 EMBARKATION

Captain John D. McGuire

13 CHAIN OF COMMAND

Dandridge M. Malone

15 ALASKAN SCOUT

Captain Walter E. Wright

17 FEATHER MERCHANT

Brigadier General James E. Shelton

18 RIFLE ZERO

Captain Everett D. Mayfield

TRAINING NOTES

35 CSC COMMANDER

Captain John Nixon

Captain Craig Benedict

37 INFANTRY AND TANKS

Captain Guy C. Swan III

39 TOW TRAINING

Captain Stephen Bellene

Captain John N. Davis

DEPARTMENTS

2 COMMANDANT'S NOTE

4 INFANTRY NEWS

41 ENLISTED CAREER NOTES

43 OFFICERS CAREER NOTES

44 BOOK REVIEWS

50 LETTERS

FRONT COVER

Amphibious operations belong to the Army's past — and to its future. The cover is an artist's conception of an amphibious landing some time in the 21st century. Original painting by Charles Willis.



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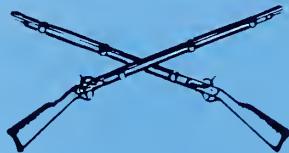
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

STANDARDIZATION — PHASE II

The Army Standardization Program, directed by the Chief of Staff of the Army (CSA), strives to abolish the modification of basic tasks that can be performed to the same standard in like units regardless of geographic locations. In a wider sense, the objective of the program is to standardize within the Army those procedures used to maintain, operate, and fight with major systems. This program includes two phases. Phase I focused on standardizing combat unit crew vehicle preoperational checks, and training management. Phase II is a continuing effort to improve Phase I actions and to add crew drills for new weapon systems, support procedures, and training management.

The Infantry School's goal in the Army Standardization Program is to ensure that no obstacles exist that will prevent coordination among unit commanders, MACOMs, and other service schools. The program also seeks to obtain the greatest possible economy in the use of combined resources and efforts.

The USAIS Standardization Committee (which is composed of subject matter experts and points of contact for each USAIS Directorate and Department) aids all commanders by eliminating time wasted relearning local modifications to basic tasks that can and should be conducted the same way throughout the Army.

The Standardization Committee has reviewed the revised load plan for the M113A1, the M106A1 and M125A1 mortar carriers, and the M220 TOW missile carrier. These revised supplemental load plans were finalized

and approved at TRADOC in mid-February 1982.

Currently, as a means of "checking the system," a Standardization Studies Program is studying specific standardization topics and identifying those actions necessary to achieve the standardization of certain basic soldier tasks. The initial standardization study topics are the construction of M60 machinegun range cards; FDC procedures for the 4.2-inch mortar; battlesight zeroing the M16A1 rifle; and engaging targets with M203 grenade launchers (hold of weapon).

An updated list of references for these Phase I topics was identified as having standardized procedures and crew drills for the following major weapon systems:

- Mortars.
- TOWs (except ITVs).
- Recoilless rifles.
- Machineguns.
- Dragons.

Since Phase II is a continuation of Phase I, it is "open-ended," and it is ensuring that standardized procedures are incorporated into the ITV crew drills (six separate functional areas). This is also true for the BIFV (38 separate functional areas).

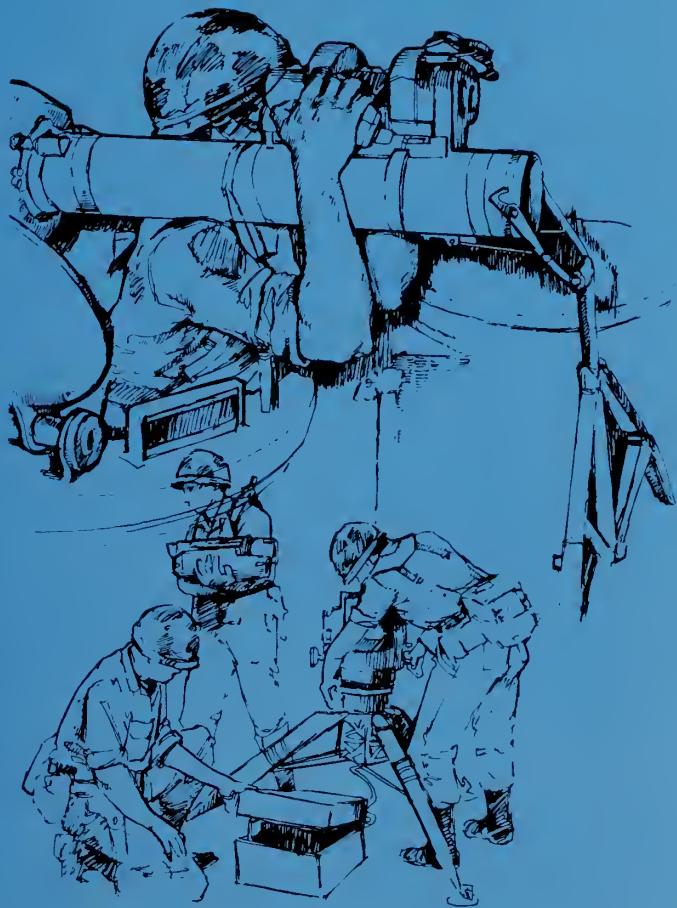
USAIS and the Army Training Board (ATB) are also developing a series of light and mechanized infantry battle drills. These fire team and squad level drills are designed to form a bridge between Soldier's Manual (in-

dividual) and ARTEP (collective) training. When published, these drills will support the standardization of training and evaluation in the Army.

Finally, to further employ the Army Standardization Program and reduce personnel turbulence, the Infantry Liaison Team (ILT) will seek feedback from all the units it visits to determine what procedures and tasks require standardization emphasis.

Our standardization efforts must evaluate and develop the full use of various ideas and concepts and should not impede unit abilities. Some officials advocate different standardization programs to provide for the needs of different major commands and geographical areas. However, the advantages of different programs for different needs must be set against the difficulty of coordinating the many such programs for the entire Army. As an example, selected procedures may be standardized within a unit in Europe, but when the soldiers from that unit are redeployed to stateside they may not be familiar with the procedures that are SOP to their new units. This is confusing to the soldier and inefficient to the unit mission.

The bottom line in accomplishing these standardization goals is for each of us to use the manuals and references already published and currently in the field. The greatest detriment to the standardization effort is the popular practice of locally modifying some procedures or adding others that often duplicate the more efficient standard that is already available and practicable. The Army Standardization Program, Phase II, will provide the necessary uniformity to enhance our potential combat power through heightened flexibility and readiness. Think Combined Arms!



INFANTRY NEWS



THE NATIONAL INFANTRY MUSEUM opened its doors at Fort Benning in 1959. Since then, tens of thousands of visitors from every state and from many foreign countries have toured its displays.

The Museum is much more than a collection of things painted OD. There is a broad spectrum of items on exhibit ranging from oil paintings, oriental rugs, fine bronzes, and sterling silver to atomic weapons, C-rations, uniforms, dominos, and documents signed by more than half of the Presidents of the United States.

The Museum also houses one of the most complete collections of military small arms in the United States, including entire families of weapons from the first prototype to the last one issued.

To assist the Museum by providing financial and volunteer support, the National Infantry Museum Society was formed at Fort Benning shortly after the Museum opened. Membership in the Society is open to anyone who is interested. The cost is \$2.00 for a one-year membership, or \$10.00 for a lifetime membership. All Infantrymen are encouraged to join the Society, which, over the years, has contributed so much to the National Infantry Museum.

Additional information about the Museum and the Society is available from the Curator, National Infantry Museum, Fort Benning, Georgia 31905; commercial telephone 404/545-4762 or AUTOVON 835-4762.

AS THE BRADLEY Infantry Fighting Vehicle reaches the field, units must seriously consider storage and maintenance facilities for both the vehicle and its firing port weapons (the M231 5.56mm).

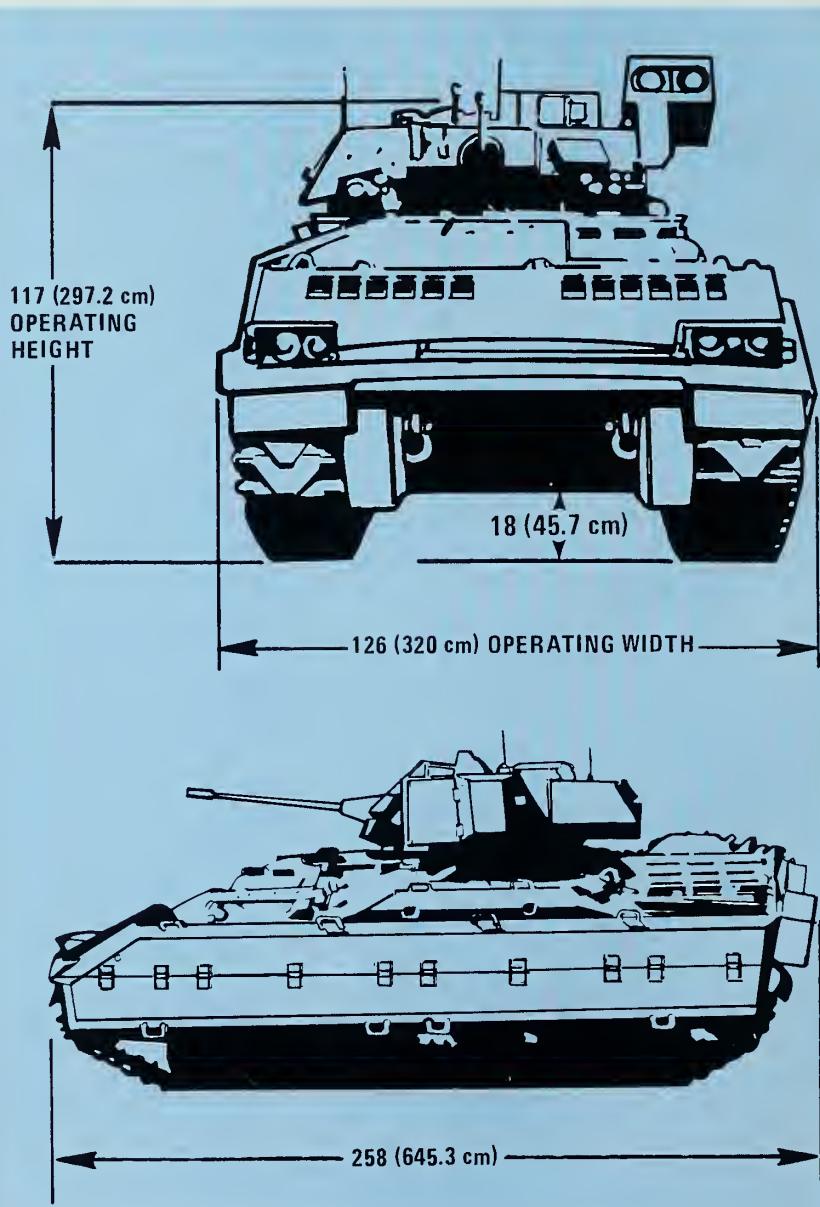
Maintenance bays in motor pools,

for instance, should have a height clearance of at least 10 feet, because the vehicle measures 116 inches from tread to turret. The operating width of the Bradley is 10.5 feet, so some modifications to the present maintenance facilities may be necessary.

The significant characteristics of

the Bradley are:

- Operating height: 117 inches.
- Operating width: 126 inches.
- Total length: 258 inches.
- Weight, combat loaded: 49,000 pounds.
- Weight, less fuel, crew, and OVE: 40,650 pounds.
- Ground pressure, combat load-

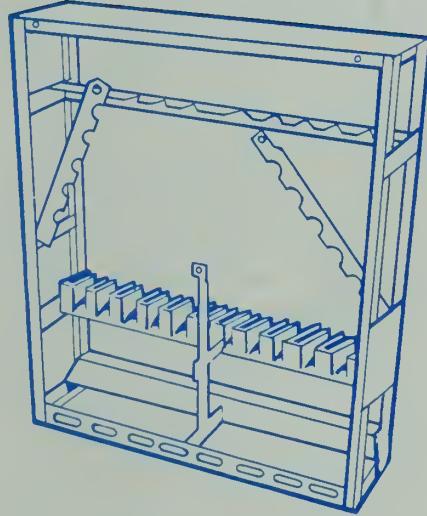


ed: 7.4 pounds per square inch.

As the M88 armored recovery vehicle will also be issued to mechanized infantry units under Division 86 TOEs, the concrete flooring both inside and outside the motor pool bays must be strong enough to support its weight. The thickness of the flooring should vary from nine inches of reinforced concrete for hardstands to ten inches for bay floorings.

The BIFV has six M231 5.56mm firing port weapons and one M240C 7.62mm coaxial machinegun that must be secured in unit arms rooms. The Bradley Cavalry Fighting Vehicle (BCFV) has the M240C but does not have the firing port weapons.

The firing port weapons will fit the current M12 weapons rack, which is designed to take the M16 rifle. They can be put in the rack in either their extended or normal mode.



M-12 Rifle Rack.

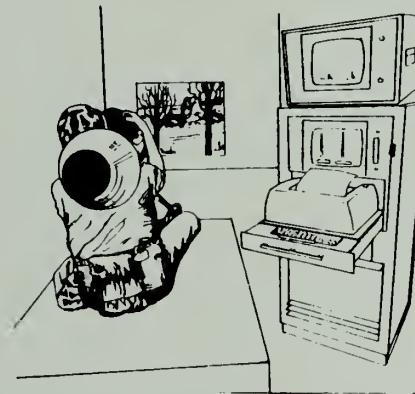
There is no weapons rack for the M240C; these weapons should be stored in wall lockers or in some other configuration according to a unit's local physical security SOP.

THE DIRECTORATE OF TRAINING DEVELOPMENTS at the Infantry School has given us the following item, which should be of interest to the infantry community:

About a year ago, the Project Manager for Training Devices (PM-

TRADE), working with the United States Marine Corps, began an exploratory program aimed at developing a high fidelity Dragon gunnery training system.

The system consists of a student station with platform and a simulated Dragon weapon, a three-dimension model board with a scale model tank that moves in response to commands from a micro-processor, and an instructor's station with a keyboard and monitors that provide real-time



information relating to the firing and simulated flight of the Dragon and its round.

When a gunner fires the device, he hears the initial explosion of the rocket motor. He also experiences a weight loss as the simulated rocket leaves his firing position, and his sight picture is momentarily obscured by simulated smoke. The gunner must overcome these launch problems and must smoothly track his target, ignoring the simulated missile that he can see in his sight.

Included in the simulation are the sounds of the round's thrusters firing and of the round's explosion as it hits the target. In addition, in his sights the gunner can see his rounds strike.

The device, known as the Simulated Tank Antiarmor Gunner System — Dragon (STAGS-D), will become the mainstay of gunner training for the entire antiarmor family of weapons, including the TOW and the Viper. The final version will incorporate the latest video tape and video disc technology and will be adaptable to the fire-and-forget weapons that are now being planned.

The STAGS device should be in the field by January 1984.

THE ARMY'S ELECTRONICS TECHNOLOGY and Devices Laboratory is developing a family of silent, lightweight power sources that operate on the principle of thermoelectric energy conversion.

Two of its G-79 thermoelectric generator units were successfully used in Germany late last year. They were used to heat and light a motor pool garage and a field tent.

The G-79 is only one of a family of portable power units, ranging in power from one-half to 10 kilowatts, that are being developed. The units are known collectively as the Silent Lightweight Electric Energy Plants (SLEEP).

Because there are no moving parts in the heart of the generator, its thermoelectric converter, it needs no lubrication or regularly scheduled maintenance. And it cannot be heard beyond 100 meters.

The generator is expected to be fielded by 1988.

ONE NEW DECORATION and three new service ribbons are now available for award or wear by qualified Army personnel. Interim Change I02 to AR 672-5-1 contains the criteria for earning the Army Achievement Medal, the NCO Professional Development Ribbon, the Army Service Ribbon, and the Overseas Service Ribbon.

The Army Achievement Medal may be awarded to any Army member who, while serving in any capacity with the Army in a noncombat area after 1 August 1981, distinguishes himself by meritorious service or achievement of a lesser degree than required for the award of the Army Commendation Medal. It will not be awarded to general officers.

The NCO Professional Development Ribbon can be worn by soldiers who successfully complete certain designated NCO professional development courses. All active

enlisted members of the Regular Army, the Army National Guard, and the Army Reserve are eligible for this award. Completion of the primary, basic, advanced, and senior level courses designated in the interim change qualify an individual for the award.

The Army Service Ribbon can be worn by soldiers who successfully complete their initial entry training. All active members of the Army, including the Reserve Components, are eligible. Officers can wear this ribbon when they successfully complete their resident basic course, and enlisted soldiers when they successfully complete their initial MOS-producing course.

The Overseas Service Ribbon is authorized for wear by a soldier when he successfully completes an overseas tour in accordance with the provisions of AR 614-30. But the ribbon is not authorized for overseas service that is already recognized with another service ribbon such as the Vietnam Service Medal. Numerals are used to denote second and subsequent awards of the ribbon.

No orders will be published awarding the ribbons, because they are authorized for certain types of service or schooling. Soldiers who meet the qualifications outlined in the interim change to the regulations may immediately purchase and wear the ribbons.

Reservists who need further information should read AR 672-5-1 and its changes or talk with their unit personnel officers. Members of the IRR should contact their personnel management officers or NCOs at RCPAC.

LIVE FIRE GUNNERY will be a major element of Bradley Infantry Fighting Vehicle (BIFV) training. The present concept calls for a mechanized infantry unit to conduct service firing three times a year — once for qualification, once for sustainment, and once during its ARTEP. To lessen the time and expense involved in this annual requirement, subcaliber firing and training devices will be

used to meet a unit's gunnery needs.

Together, the Infantry and Armor Schools have developed FM 71-999A (Draft), Infantry and Cavalry Fighting Vehicle Gunnery, which takes into account the different gunnery requirements of the two vehicles caused by the firing port weapons on the BIFV.

The gunnery program will not be cyclic. Therefore, all squads will not have to start the program at the same point. Rather, each commander will have to determine his unit's level of proficiency and adjust his program accordingly.

BIFV training will also include a master gunner program, which will be similar in many respects to its armor counterpart. Accordingly, the BIFV master gunner will play a major role in BIFV gunner training and in support of turret and fire control maintenance. He will serve as his unit commander's expert on BIFV gunnery, and will perform the following gunnery functions:

- Assist his commander in preparing an annual BIFV gunnery program and in conducting live fire BIFV gunnery.
- Administer individual and collective gunnery skill tests.
- Assist teams, squads, and platoons in their pre-fire gunnery training and in their gunnery and battle drills.
- Assist vehicle commanders during pre-firing checks, boresighting, and zeroing.
- Supervise and manage the use of the conduct-of-fire trainer (COFT).
- Help his commander to analyze individual and collective gunnery performances.
- Help his commander to identify potential gunners among his Skill Level 1 soldiers.

The master gunner will also be responsible for giving commanders and staff officers an evaluation of the state of readiness of the unit's BIFV mounted weapon and fire control systems. He will see that operator maintenance checks, services, and alignments are accomplished on those systems; he will evaluate the consequences of improper operation or

lack of proper maintenance on those systems; and he will plan for the availability of the BIFV for training purposes and for combat based on the estimates of the time needed for scheduled services, inspections, and repairs at organization and direct support levels, to include any automotive requirements. The master gunner must be able to translate his evaluations into appropriate training and operation plans.

The turret maintenance functions of the master gunner will require considerable scrutiny and evaluation as the BIFV's mechanic program evolves. As it is now planned, the turret mechanic (MOS 45T) will merge with the automotive mechanic (MOS 63T) at Skill Level 3. Consequently, motor sergeants in units equipped with BIFVs will have the training they need to supervise both turret and automotive maintenance. Previously, the inability of motor sergeants in MOS 63C to supervise tank turret maintenance effectively detracted from the quality of the maintenance that was being performed.

Since mechanized infantry units presently do not have master gunners, provisions must be made to incorporate the BIFV master gunner requirements into the mechanized battalion's operations section as a separate position and also into the new equipment training effort. The authorization is expected to be one sergeant first class in the battalion S3 section and one staff sergeant, who would serve as an assistant platoon sergeant as an additional duty, in each line company.

THE FOLLOWING NEWS ITEMS were submitted by the U.S. Army Infantry Board:

- **Pistol Test.** The 9mm pistol program manager recently asked the Infantry Board to conduct a hit probability test on several 9mm pistols that were being considered for adoption by the military services. This was part of a testing program directed by the Army's Materiel Readiness Command.

Thirty-five representative test

soldiers were used in the Board's test. They were both male and female, and both left- and right-handed firers. Some were expert shooters from the U.S. Army's Marksmanship Unit.

The test soldiers completed familiarization training, fired a known distance course, and then fired on a computerized combat pistol course that was built by the Board. The course had seven lanes with ten targets on each lane at distances ranging from 13 meters to

50 meters. A computer controlled the range's operation and gave immediate hit, miss, and round count data. The course was used to collect hit probability data on the 9mm pistols as well as on the control pistol, the .45 caliber M1911A1 weapon.

The test manager was Captain Charles Pavlick; his assistants were Sergeant First Class Ronald Waldheim and Staff Sergeant Eric Malone.

• FVU-COFT. There is a need for a training device that can be used to correct anticipated training deficiencies when the Bradley infantry and cavalry fighting vehicles are fielded. The Board conducted an operational test on such a device, the Fighting

period, the groups were evaluated on the BIFV using live ammunition and firing the main 25mm gun, the coaxial machinegun, and the TOW. The results will be used to recommend, if warranted, the continued development of the FVU-COFT.



The DMD/MBC as tested by the Infantry Board.

and evaluated for accuracy.

The Infantry School will use the results of the test in future procurement decisions concerning the mortar ballistic computer.

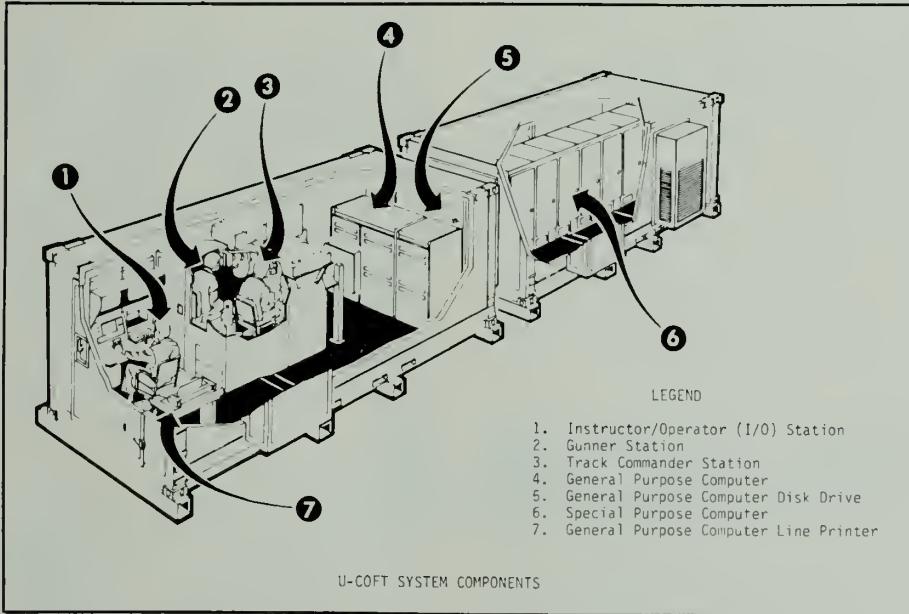
The test manager was Captain Noble T. Johnson, and his assistants were Sergeant First Class Theodoric Garner and Staff Sergeant Robert Taylor.

• Brown Boot. Recently, the Board was tasked to conduct an operational test of a new rough-out brown leather combat boot.

The soldiers selected to take part in the test of the new boots were Ranger Department instructors, initial entry trainees, and members of combat, combat support, and combat service support units. The Ranger instructors wore the new boots daily. Other test soldiers alternated wearing the new boots with their regular black boots. Half of the basic trainees wore the new boot while the other half wore the black boots for a complete 13-week training cycle.

The Board was directed to end the test before its scheduled completion date because numerous manufacturing defects and failures with the soles of the boots had become apparent.

The test manager was Captain Timm Prouty; his assistants were Sergeants First Class Doyle Alford and William McLeod.



Vehicle Unit Conduct of Fire Trainer (FVU-COFT) to evaluate the effectiveness of the training program.

Two groups of test soldiers were trained, one group on the FVU-COFT and the other on the BIFV. Upon completion of the training

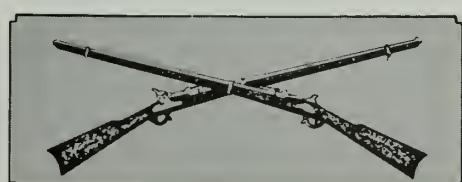
The managers for the operational test were Captain Raymond Jones, Captain James Cambron, and Lieutenant Michael Allison. They were assisted by Sergeants First Class Harlan Selle, Alphonso Millender, and Bruce Smith.

modified and programmed to function as a mortar ballistic computer.

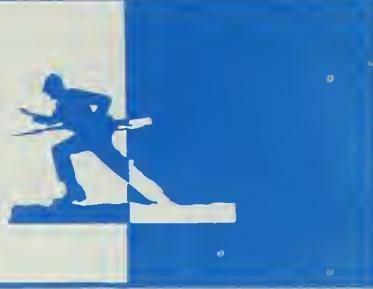
Infantry School mortar instructors were used as test soldiers, and each independently computed firing data for both the 81mm and 107mm mortars. Each computation was timed

• DMD/MBC. The Board conducted a concept evaluation program (CEP) test of the Digital Message Device/Mortar Ballistic Computer (DMD/MBC).

The test evaluated the usefulness of a digital message device after it was



FORUM & FEATURES



Amphibious Warfare School



CAPTAIN ERNEST W. COOLER III

The art of amphibious warfare is uniquely suited to the United States Marine Corps. Or perhaps it is the Marines who are uniquely suited to the art of amphibious warfare.

The Corps began studying this form of carrying the battle to the enemy before World War I, and the ensuing years brought the problem of executing amphibious landings into sharper focus. At the time, the future of the Marine Corps seemed to include the employment of this infant art in the protection of U.S. interests in the Pacific. By 1934 it had become apparent that Marine officers needed formal training in amphibious warfare, and the Marine Corps Amphibious Warfare School (AWS) was established.

The School should be of special interest to Army officers, because each year several of them are selected to attend along with officers from other services and other nations.

The Amphibious Warfare School (the equivalent of the Army's branch officer advanced courses) is conducted once each year by the Marine Corps Development and Education Command at Quantico, Virginia. It begins in late August and lasts for 39 weeks. Each class consists of about 190 officers, including about 14

foreign military officers, an occasional U.S. Navy officer, and several U.S. Army officers of various branches.

Just what is it that these Marines do for 39 weeks in AWS that would interest an Army officer? For one thing, an Army officer who graduates from the course receives credit for attending an advanced course. For another, the instruction he receives and his association with the Marines make it a valuable experience.

Unlike an Army officer advanced course, the AWS places more emphasis on staff-oriented tasks than on the maneuver and administration of a company. The principal objective of the course is to train officers to operate as members of a staff in the various elements that make up a Marine Air-Ground Task Force (MAGTF). The instruction focuses on developing the students' background knowledge of the various types of Marine Corps units, their organizations, and their missions.

After the basic building blocks of amphibious operations and of the MAGTF have been established, the last four months of the school are devoted primarily to the tactical employment of these elements in the form of Marine Amphibious Units

(MAUs), Marine Amphibious Brigades (MABs), and Marine Amphibious Forces (MAFs). During this time, the students occupy different staff positions and work on various kinds of operations.

Although precise staff planning is demanded, equally important is a firm understanding of the enemy threat that exists on the potential battlefields of the world. To foster an appreciation for the Threat's present capabilities, the School's faculty members take advantage of the resources of the intelligence community in the Washington, D.C., area for the School's guest lecturer program. These guests present the basic Threat capabilities and also keep the students informed of the latest innovations in Soviet technology, tactics, and doctrine.

ELECTIVES

Another interesting and valuable diversion from the classroom routine is provided by the electives program. For at least six hours per week, the students have an opportunity to broaden their horizons in several fields by taking up to three elective courses. The topics range from third

world terrorism to the Civil War, from mechanical forces on the modern battlefield to Infantry MOS improvement. Still other courses offer graduate credit in management from George Washington University.

These electives allow the students to conduct extensive study in areas that either improve the skills they already have or to open entirely new fields of interest. During one of the elective periods, all students must take a course in effective writing, with the emphasis on grammar and composition in military writing.

The physical fitness portion of the course consists of two hours set aside daily for lunch and what is called the Physical Excellence Program. These two hours, usually from noon until 1400, are normally spent in the gym or out running three to ten miles. Those who choose not to run or work out are subjected only to the disapproving glances of their peers.

As with most things, however, a day of reckoning comes in the Marine's routine of physical training (or lack of it, as the case may be), for once in the fall and once in the spring the Physical Fitness Test (PFT) is administered. While the scores are nor-

mally as expected from good Marines, the few who have spent an hour or two too many in the lunch line instead of in the gym must embark upon a "conscientiously applied program of physiological metamorphosis" and retake the test later. The PFT itself consists of bent-leg situps, pullups, and a three-mile run.

Throughout the course, the best lessons for Army officers come not from studying the mechanics of back-loading and crossloading amphibious shipping or even Napoleon's maxims of war. Rather, they come from the daily association with the officers of the Marine Corps, of our other sister services, and of our allies.

The benefits of having Marines and Army officers get a close look at each other are obvious. And the benefits of having some Army officers who understand the inner workings of MAUs, MABs, and MAFs cannot be disputed. But the real treasure found in this school is the appreciation the Marines have for their traditions. This is a quality that until recently was all but lost in the Army, but which now seems to be enjoying a renaissance.

Any Army officer who wants to at-

tend the AWS should have a good background in TOW assignments and a solid understanding of how the Army intends to win the next war.

The Army's Military Personnel Center selects the officers to attend the course. An Infantry officer who is interested, therefore, should request the AWS in lieu of IOAC on his preference statement, because his chances are a lot better if Infantry Branch knows that's what he wants.

Further information on the school can be obtained from the various assignment officers at MILPERCEN or from the Director, Amphibious Warfare School, MCDEC, Quantico, Virginia 22134.

CAPTAIN ERNEST W. COOLER III, a 1973 ROTC graduate of Clemson University, is now serving as an Assistant Professor of Military Science there. He has completed the Airborne and Ranger Schools and the Marine Corps Amphibious Warfare School. He has served as a platoon leader in rifle, support, and TOW platoons with the 3d Armored Division and as a company commander in the 1st Infantry Training Brigade at Fort Benning.

ANGLICO

MAJOR WILLIAM R. JONES



ANGLICO. Air and Naval Gunfire Liaison Company. A special kind of United States Marine Corps unit that does not support its own kind. Rather, it exists to support U.S. Army or Allied units when those units operate with or near a Marine air-ground task force — usually in amphibious operations — or when they are to be sup-

ported by U.S. Navy or Marine Corps air elements or by naval gunfire.

An ANGLICO is made up of supporting arms specialists. It has its own vehicles, radios, and cryptographic gear and can support the committed elements of an Army division. Its members are organized into teams that can co-locate with each Army

command level from a company on up. Thus, a brigade platoon contains enough Marine Corps and Navy personnel to support the committed elements of one Army brigade. If necessary, a team can be shifted from one platoon to another.

When a full ANGLICO deploys to support an Army division, the

ANGLICO commander — usually a Marine Corps lieutenant colonel who is a ground officer — acts as the division's naval gunfire officer. Its executive officer — a Marine Corps major who is an air officer — becomes the division's air officer. Enough enlisted personnel accompany these two officers to provide clerical and communication support at the division command post. A headquarters platoon also deploys with the ANGLICO to give limited communication and motor maintenance support to the various teams. At the brigade level and below, though, the supported unit must provide the bulk of the communication and motor maintenance support for the ANGLICO teams.

A brigade platoon also has two officers: a Marine major (an air officer) and a Navy lieutenant. These officers serve, respectively, as the brigade's air liaison officer and its naval gunfire liaison officer. They help the brigade staff plan for and execute any naval air and gunfire support that will be given to the brigade commander.

Two officers also head a battalion team. One is a Marine captain (air officer), who serves as the battalion's air liaison officer, and a Navy lieutenant, junior grade, who performs the duties of the battalion's naval gunfire liaison officer. The ANGLICO can also offer the commander of a committed Army battalion certain other assistance, if it is needed: a Marine first lieutenant air officer, who, with his tactical air control party, can act as a forward air controller, and a Navy lieutenant, junior grade, who can head up a spot team for shore fire control.

All of the ANGLICO teams are tied to each other by a liaison radio net, which not only strengthens their liaison function but also gives the supported unit a backup radio net for passing along vital information or support requests.

The Marine Corps is testing the universal spotter concept as well as proposed tables of organization and equipment to support that concept. Under it, one officer would be trained

to control air, naval gunfire, and artillery support for a committed battalion or company. No longer would there be a separate officer to control each type of fire support.

If approved, a Marine Corps artillery lieutenant would head the company team, which would be known as



a firepower control team. He and six enlisted Marines would replace both the tactical air control and the shore fire control parties that are now sent to a committed company.

The battalion team would also change from its present organization. While two officers now head that supporting team, only one, a Marine captain (an air officer who has also been trained in controlling naval gunfire), would head a supporting arms liaison team. He would be aided by seven enlisted Marines, the senior of whom would be a naval gunfire specialist.

The results of the test program are scheduled for release in 1983.

Today's ANGLICOs — the 2d ANGLICO at Camp Lejeune, and the Separate Brigade Platoon, 2d ANGLICO, at Camp Pendleton — are operationally controlled by the two Fleet Marine Force commanders. Although there may be some room for confusion in their titles, the two ANGLICO organizations are separate and distinct entities; they differ in structure as well as in support capabilities, and they answer to two different force commanders.

Whenever possible, the 2d ANGLICO works closely with the 82d Airborne Division during its Army Training and Evaluation Program (ARTEP) exercises. This serves to keep the Marines up-to-date with current Army tactics and with any changing emphases within the Army's XVIII Airborne Corps.

ANGLICOs exist solely for the use of U.S. Army and Allied forces when they work with naval supporting arms. Their teams provide essential communication links for naval air and gunfire support as well as on-hand liaison personnel and controllers.

All of the Army's infantry commanders should be aware of this Marine Corps organization, for there are many areas of the world in which Army units might be committed with no support except from naval units. When Army commanders "think combined arms," therefore, they would do well to include naval air and gunfire support in that thinking.



MAJOR WILLIAM R. JONES, USMC, is a 1969 graduate of the U.S. Naval Academy. Following his Basic School course, he attended flight training at Pensacola, Florida. He has flown helicopters, tactical jet aircraft, and the AV-8A "Harrier" aircraft. He recently completed a tour with the 2d ANGLICO, during which he worked with units of the 82d Airborne, the 101st Airborne (Air Assault), and the 7th Infantry Divisions, as well as allied units.

EMBARKATION



CAPTAIN JOHN D. MCGUIRE

The global mission of today's Army, combined with the Navy's amphibious capability, makes it imperative that our company and battery commanders learn some of the things they will have to do to become "soldiers of the sea."

Many of the Army's units, primarily infantry companies from Fort Bragg and Fort Campbell, are being taught each year in a one-week course at Little Creek, Virginia, the basic amphibious skills they will need. Marine and Army instructors at the Landing Force Training Command, Atlantic, provide training in amphibious raids and assaults, along with the peripheral skills needed to perform these operations.

During their week at Little Creek, the soldiers are also introduced to shipboard life, and usually find that it requires a few adjustments on their part. Without some insight into these changes in their lifestyle, the soldiers can have problems on board ship. But there are some things their units can do to help ease this transition.

As a first step, an advance party from the troop unit should go aboard a day or two ahead of the rest of the unit, especially if the ship is docked at a pier. (If the ship is anchored some way out, or if time does not permit the unit to send an advance party, then the first group of soldiers to go aboard should perform the same functions.)

The advance party should consist of at least one officer, one senior noncommissioned officer, and four to six soldiers. (This team is not the same as the ship's platoon, which is a detail assigned to help the Navy load

vehicles, supplies, and equipment.)

The officer in the advance party should provide liaison with the ship's executive officer (XO) and with the ship's first lieutenant, a naval officer who shares many responsibilities in getting the troop unit aboard in a safe and orderly manner.

The advance party's first step should be to tour the particular areas of the ship that must be inspected before the unit arrives, such as the troop berthing (sleeping) spaces, the heads (latrines), the troop administrative office, and the messdeck (dining facility).

The party should check the berthing spaces for cleanliness and habitability; it should note any breakages; and it should conduct a complete inventory of all the materials (racks, mattresses, pillows) that the unit will use.

The inspection team should make sure that all the toilets, urinals, sinks, and showers are serviceable and that toilet paper and cleaning gear are available. The general cleanliness of the area is also important to note, as is any breakage.

Failing to perform these checks could lead to confusion, poor morale, and a bad working relationship between the soldiers and their Navy shipmates. Moreover, the unit might be presented with a bill when it departs for any breakage that the advance party failed to note.

The next task of the advance party is to find out in what ways (and in what numbers) the soldiers will be needed to augment the Navy personnel in certain daily functions. The advance party officer, for instance,

should ask how many soldiers are needed to help during mealtime on the messdecks. (The rule of thumb calls for one messman per 20 troops.)

It is common, also, for the embarked unit to assign NCOs, on a rotating basis, to assist the Master-at-Arms force with any disciplinary matters that involve the troops.

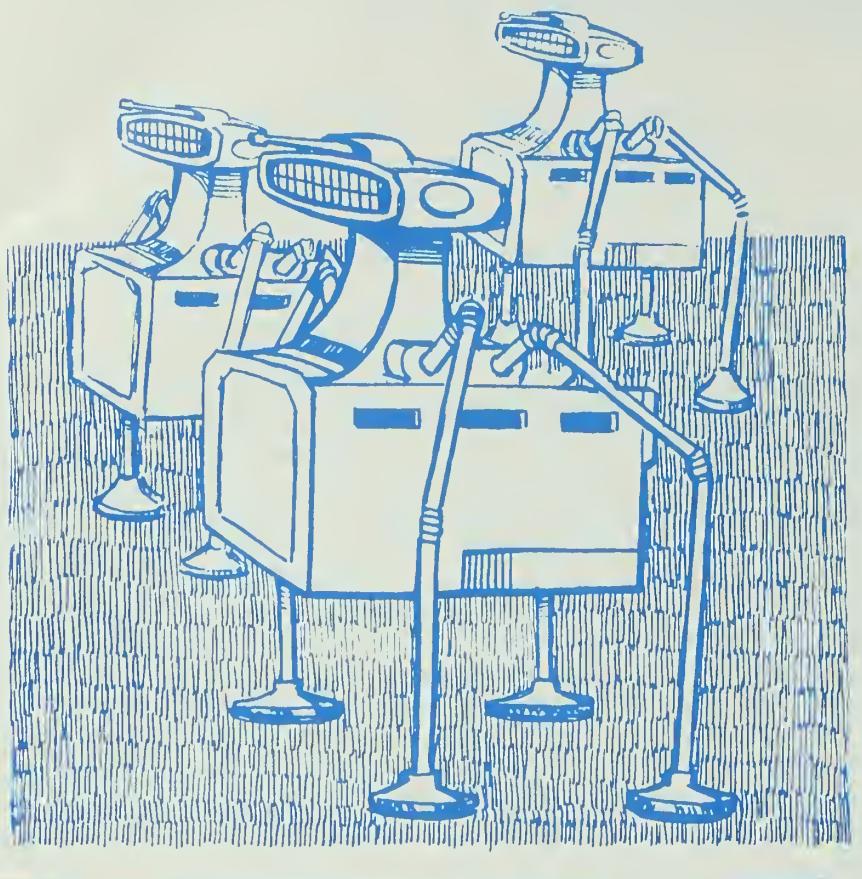
Other specific areas of interest for the advance party officer include:

- Linen distribution and turn-in.
- Weapon stowage.
- Ammunition, pyrotechnic, and demolition stowage.
- Troop meal hours.
- Restricted areas.
- Smoking regulations.
- Entertainment for the troops (movies, library, and weight room.).
- Shipboard drills (abandon ship, man overboard, and general quarters) and liferaft serial assignments.
- Berthing for officers and senior NCOs.
- Special reports required by the ship.
- Hours for sick call and dental call.

Of special interest and concern for the advance party is the protocol involved in the billeting and messing arrangements for the officers and the senior NCOs.

The officers from the embarked unit will be billeted in "Officer's Country" and will take their meals in the wardroom, where certain rules of etiquette must be observed, especially those that involve the ship's captain.

The laws of the sea, by tradition and by Navy regulation, hold the captain responsible for the ship and for the actions of the crew: He is regard-



ed as master of all that happens within his realm. Accordingly, several customs honor his position.

When he enters the wardroom, for instance, all officers rise. The evening meal (and sometimes the noon meal) begins only when he arrives or sends his consent; all officers stand behind their chairs until the captain asks them to be seated. If an officer is late or must be excused from the table, he asks the captain for permission to join or leave the mess. The captain's seat at the table is left vacant in his absence. If a movie is to be shown in the wardroom after the evening meal, it starts at his direction. And on the bridge of the ship there are chairs on both sides reserved only for him.

Certain procedures also govern the accommodations for the noncommissioned officers. Senior NCOs berth and dine with the ship's chief petty officers (CPOs). The chiefs are part of a very distinct entity within the Navy's enlisted rank structure, a fact that is apparent in their shipboard

lifestyle. Their mess is similar to the wardroom, and, like Officer's Country, it is considered off-limits to all others except for those on official business.

Having made these preparations, the advance party should be ready when other members of the unit board the ship.

First, the soldiers are guided to their compartments, which should have been assigned to maintain unit integrity as much as possible.

Weapons stowage has first priority. Rifles may be secured either in individual rifle racks, with locks, on each soldier's bunk, or in an armory to accommodate all weapons.

Crew-served weapons are always kept in an armory, while all ammunition, pyrotechnics, and demolitions are secured in a special locker provided by the ship's gunner's mate.

When the bunks have been made (with the linen distributed by the advance party) and when personal gear has been stowed in wall lockers, the

troops are briefed on the particulars of their new home, and then they carry out the plan of the day.

The senior Army commander on board is normally designated the commanding officer (CO) of troops. He is responsible for the actions of all the troops aboard the ship, regardless of their unit. In this capacity, he answers to the captain of the ship in the same manner as does a naval officer assigned as a department head (engineering, deck, operation). The CO of troops is presented at meetings as deemed necessary by the ship's CO or XO. He also assigns additional duties to junior officers — such as the duties of laundry officer, mess officer, and billeting officer.

Once the unit is aboard, its training and the ship's work are carried out according to their respective schedules. Physical training, preventive maintenance, and essential military matters are carried out to keep the troops busy and to prepare them for the coming mission. Daily inspections of troop berthing areas and heads are conducted to make them as habitable as possible.

For the uninitiated, life aboard ship is a learning experience. The troops absorb nautical terminology quickly: Doors become hatches, stairways become ladders, and floors become decks. (Marines use these terms ashore as well as aboard ship.)

A cardinal rule for all sea-going soldiers is to treat the ship like what it is — the sailors' home. If they do, it will soon seem like their home, too, instead of merely a form of transportation. In a short time, all hands will look forward to the impending amphibious operation or the first liberty port.

CAPTAIN JOHN D. McGuire, USMC, a 1974 NROTC graduate of the University of South Carolina, has served as an instructor at the Landing Force Training Command, Atlantic. He has also served as a rifle platoon commander, a 106mm RR platoon commander, and a company executive officer with the 2d Marine Division and as a staff officer in the G-3 section of the III Marine Amphibious Force headquarters.

Chain of Command



DANDRIDGE M. MALONE

The chain of command lays out very clearly the line of legal authority from the President of the United States right on down to you. It spells out who has authority to issue orders to who. It identifies for anyone, at any level, who is in charge. And, finally, it identifies who is responsible for getting tasks done and for taking care of the people who do them.

A chain of command is an absolute essential for getting done, in an organized way, any task that requires the effort of more than one person. That is a flat-out fact of any organized effort. What this should tell you, as a leader, is that here is a leadership fundamental. Knowing how the chain of command works is an absolute essential in figuring out how to know what to do, and how to get it done.

But for now, never mind the links of the chain that run up through those upper levels of leadership to the President. Think instead about the links in the company. And call this the leadership of the unit — the captains, lieutenants, sergeants; the nervous system; the channel of communication that coordinates and controls; the thing that puts together skill, will, teamwork, all that equipment, and all those weapons; the thing that focuses combat power.

Why is the chain of command so important? Well, as with almost anything else in the Army, if you want to know the real reason or purpose of something, go to the battlefield, where the unit fights. The why for anything about the Army must always be answered there.

In the company, on the battlefield, there is no time for silly arguments

and discussions about who takes orders from who, or which orders to follow, or what the objectives ought to be, or what standards should be established. Any of this wastes time, and destroys the quick, smooth coordination that the unit must have if it is to win in the deadly business of delivering steel. On the battlefield, the formal chain has been established by law and TOE; leaders have been appointed by the commander to hold designated leadership positions; and authority, responsibility, and obedience are facts. All that's settled. What the chain of command does on the battlefield is COMMUNICATE.

Somewhere in a leadership class you probably spent considerable time on the techniques of how people communicate. But this is not really that kind of "communicate." This is communicate, as on the battlefield. And there, the chain of command is the main channel, the prime line, of the communications — the information — that must flow among all the parts of the company so that it can fight as a unit, as a whole "thing."

The chain of command coordinates and controls. And to do this, it must move information up and down among the levels of leadership of the unit. The chain of command moves battle information — quick, clear, clean, complete — and only the critical, and only the truth. It is the nervous system of the unit. And if the chain has breakdowns or failures, then the unit will go to pieces, and lose, and die. This simple fact of the battlefield explains many things.

It tells you why there are prescribed hand and arm signals. It tells you why

there is a prescribed language for the radios and telephones, and why experienced leaders will discipline this carefully. It tells you why you should learn, use, and make instincts out of the estimate, the troop leading process, and the five-paragraph field order. These are the main messages in the language of a chain of command communicating in battle. And, finally, it tells you why older, wiser, experienced leaders are always so concerned about "working through the chain." The reason is simple. What these leaders know is that the development, functioning, and maintenance of the chain of command, in peacetime, is the major determinant of whether the unit will survive and win in battle.

LINK

As a leader, you are a link in the chain of command. You already know this, but it means far more than just a green tab or a position on the organizational chart or a picture on the day room wall. When that unit fights, you do many things, but the most important thing you do is communicate — get, process, and move information, both up and down.

In a smoothly functioning chain of command that is working hard at delivering steel, there are only two kinds of information moving downward in the chain, and two kinds moving up. Flowing downward are orders, the things that control. Once in a while, you might get a whole, written-out, five-paragraph field order, brought by a runner. More often, you'll get a

fragmentary order, coming over the radio from your leader as he makes the inevitable changes and adjustments called for in that final step of good troop leading procedure. The other kind of information moving downward is planning information, the kind that you as a subordinate need for your planning, for coordinating with other parts of the unit, and for figuring out, ahead of time, what to do next.

Moving upward in the chain, there are, first and most important, such reports as enemy sightings, and status reports, and SITREPS, and locations. Reports tell the unit's brain about what's happening inside the unit — what all the parts are seeing and doing, and what kind of shape they're in. More important, these reports moving upward describe the progress in carrying out the orders that came down before.

The second kind of information moving upward are requests for support — which parts of the unit need more of what to carry out their orders. It is these requests that can bring to bear the awesome power of the combat support units.

And so, very simply, that's what happens when the chain communicates and the unit fights: two kinds of information moving down and two kinds of information moving up. Now, this information doesn't just flow along, like through a pipe. It is carried by many things — messages on paper, runners, hand and arm signals, smoke grenades and flares, radios and telephones. And, most often, at your level, by men yelling and shouting and calling to each other.

This is how the chain of command communicates. The chain of command is what tells a unit what to do. And the chain of command is what gets it done.

You, as a leader, are vital, critical, as battle information flows up and down the chain of command. Again, the most important thing you do, as a link in the chain, is COMMUNICATE — get, process, and move information. And right here, let's

develop some how-to's about these three tasks.

First off and flat out, you, as a leader, must be expert in the nomenclature, functioning, operation, and maintenance of any piece of communications equipment and any communications procedure used or likely to be used at your level. This is far more important to you as a leader than being expert with your individual weapon. There is no qualification badge for being expert in communications. That's one of the things that any leader is expected to be.



Getting information does not mean waiting until it is given to you. If it is needed, you get it. From above or below. This says that you, as a link in the chain of command, need to be thinking constantly about what information is needed by the link above you, and by the link below you. Getting does not mean just receiving. What you get, from above or below, may have errors in it. Or you may not understand it. In either case, think, and compare what you get with what you already know and remember. If it does not seem right, or if you do not understand it clearly, go back to where you got it and check.

A remote unit radio set up on a hill somewhere can pass on, unchanged, all the information it gets, going up or going down. But remote units aren't links in the chain of command. You, as a leader, are supposed to process the information to use it and to do things with it. If you get a five-

paragraph field order, you process the information in it by running it through the estimate. Then you move that information on when you issue your own orders.

Most of the time, good processing requires that you cut out some of the information you get before you pass it up or down. This is tricky. Remote unit radios cannot do it. To cut out the right things, and do it right, you have to know the information needs of the link above and the link below. Then you can answer this question: Which information is "need to know," which is "good to know," and which is "nice to know"? If time is critical and things are moving fast, then cut out the nice and the good.

Processing also means that you must often change information. You don't change the meaning or the truth of the information, but you often have to change the words, or the language, or the way the information is carried, so that the next link up above or down below can understand it. In effect, you translate. A fragmentary order comes down to you as a bunch of words on the radio, and you translate that into a hand and arm signal for the next link below. The meaning of the words and the signal is the same. The words on the radio and your arm both say "Attack!"

Moving information means you don't sit on it. If you make a conscious decision to stop some item of information while you are cutting down and translating, that's fine. But, if you know the information needs of the links above and below, then you know what is critical. And if what you have is hot, then it has to move with speed and accuracy, like a reflex action in the nervous system of a well-trained athlete.

Speed is determined mainly by how important you think communications are and by how expert you are with communications equipment, procedures, and techniques. And accuracy — accuracy is determined not by you, but by the link that receives the information you pass on, up or down.

There is one simple, critical rule right here, particularly applicable in the tricky business of moving orders downward: Always check to see that an order is understood. An affirmative nod or a "Roger" on the radio is often not enough. When there is time, and you're moving a critical order, ask the link on the receiving end to say back the information you sent. And further, if you're good, you won't quit there. You'll watch to see what happens as a result of the information you sent.

The chain of command coordinates and controls; orders and planning information flow down; reports and requests flow up; and each link in the chain gets, processes, and moves information. Fighting the battle takes only a short time. Getting ready to fight is a full-time, long-term, every day activity, with a multitude of tasks to be accomplished. The chain of command is what gets both things done. Time spent studying and talking about how the chain communicates will not be wasted.

DANDRIDGE M. MALONE, a retired Infantry colonel, is a prolific writer, having published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools including the Armed Forces Staff College and the U.S. Army War College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

ALASKAN SCOUT



CAPTAIN WALTER E. WRIGHT

Throughout military history many types of scout or reconnaissance units have been organized to gather intelligence information for their commanders. In Biblical times Moses sent scouts into the Promised Land to find out what it had to offer, and every major military unit since has had its scouts working ahead of its major combat units. In the history of the United States, the cavalry scouts of the Indian wars come readily to mind as some who moved swiftly over long distances and under harsh conditions.

Scout units have always been the eyes and ears of the tactical commander. When used properly they have been responsible for many successful operations, but, when misused, for some major military disasters.

Each combat maneuver battalion has organic scout or reconnaissance units and also uses non-organic scout units when they are available. These units, with ground, mounted, or aerial scouts, are highly trained and motivated to see that the commander

gets the information he needs.

In the tradition of these special units, one can be called unique in the total Army force -- the Alaskan Scout. These soldiers are members of the 207th Infantry Group (Scout), Alaska Army National Guard, which was organized in 1942 as the Alaska Territorial Guard (ATG).

The ATG, consisting primarily of Eskimos and Indians scattered among the numerous villages along the islands and the coastal periphery of western Alaska, was organized to meet any Japanese threat to the Alaskan territory. These native soldiers served patriotically and, since the ATG was never federalized, without pay from 1942 to 1947. In 1948 the Alaskan units became part of the Army National Guard system with the scout battalions designated the 297th Infantry.

In its present organization there are five scout battalions and a group headquarters. The 1st, 2d, and 3d Battalions are "pure" scout units headquartered in Nome, Bethel, and

Kotzebue, respectively. Each of these units is made up of a number of scout companies scattered over a geographic area equal in size to several of the lower 48 states.

The basic scout unit is the five-man scout team consisting of a team leader, a radio telephone operator, and three scouts or observers. Its missions are primarily reconnaissance oriented rather than combat oriented. For special operations such as ambushes, raids, or direct combat action, two or more scout teams are organized as a patrol to accomplish the mission.

The teams report their observations to their respective company headquarters, which pass the intelligence information to the battalions. From the battalions, the information is passed to the group headquarters and then to the Army Force Commander in Alaska, whose headquarters then sends it to other units within the state.

Each scout company has from 10 to 20 teams, depending upon the population in the company area.



These scouts provide a valuable service to the commander of the Army forces in Alaska.

These scout companies are also unique in that they have female soldiers who are authorized to perform medical, supply, administrative, and communication activities but not active combat missions.

The 4th Scout Battalion, located in Juneau and along the southeast Alaska panhandle, is organized somewhat differently. It is similar to a light infantry unit in that it has light crew-served weapons such as M60 machineguns and 81mm mortars. The unit also has six LCM8 landing craft.

The 5th Scout Battalion, in Anchorage and Fairbanks, is a mechanized unit and has both M113 and M577 armored vehicles. This unit has more ground mobility than its sister units and heavier firepower with its .50 caliber machineguns and 107mm mortars. It can be considered a cross between an armored cavalry and a mechanized infantry unit and is responsible for covering the state's interior road network and for helping to defend the various military installations in the interior.

The group headquarters company has a company headquarters, a group headquarters, a communication platoon, an airborne detachment (to perform long range reconnaissance patrols and pathfinder missions), and an aviation detachment (with 18 UH-1 and 4 CH-54 aircraft). Each battalion has an aviation section with

two UH-1 and one UV-18 Twin Otter fixed-wing aircraft, and the 4th and 5th Battalions also have combat engineer platoons.

Because of their scattered locations and specialized missions, these scouts have to rely on aerial resupply or live off the land. But because many of the scouts are subsistence hunters, whalers, and fishermen, they are able to live and operate in a harsh arctic environment that usually defeats other soldiers.

All of these scouts provide a valuable service to the commander of the Army forces in Alaska. They perform their military reconnaissance missions every day during their normal activities along the western periphery and routinely report sea and air activities. They also report or turn in items with a possible intelligence value that they find washed up on the beach or floating off the coast.

As members of the Army National Guard system, the scouts have to meet the same requirements their counterparts in the other 49 states and Puerto Rico do, conducting 48 drill assemblies and a two-week annual training period each year. Because of a heavy summer employment cycle and the need to train during the winter months, the Alaska National Guard conducts its drill and AT periods between September and April instead of during the summer,

as most Guard units do. This schedule also coincides with the winter training cycle of the Active Army units in Alaska.

During this annual training period, many field training exercises and other joint training maneuvers are conducted that allow the National Guard and Active units to work together. Such cooperation helps to forge the bonds of strength and mutual respect between these units that guard the northwestern frontier.

The members of the Alaska Army National Guard — the Alaska Scouts — are a unique element of the U.S. Army. These soldiers live and operate in a harsh environment that does not forgive human error, and they perform their mission year round in defense of their homeland, their state, and their nation.

CAPTAIN WALTER E. WRIGHT, a 1973 ROTC graduate of the Virginia Military Institute, is now assigned to the National Training Center, Fort Irwin, California. He has previously served with the 172d Infantry Brigade and the 101st Airborne Division (Air Assault). He holds a master's degree from Western Kentucky University and has completed the Infantry Officer Advanced Course.

Feather Merchant



BRIGADIER GENERAL JAMES E. SHELTON

The other day I used the term "feather merchant." When a lieutenant asked what it meant, I didn't have a good answer for him. After thinking about it, I decided to try to define it.

A feather merchant is a person who wants you to believe that he really cares when he really doesn't. He declares himself a "people" guy because that's the "in" thing to say. Yet he gives only a dollar, or maybe five, to a fund drive, while his soldiers sign up for a 20-dollar a month payroll deduction.

A feather merchant looks outward, not inward; he worries only about the image, not about what's really going on. When he has a visitor and that visitor is clearly influential or senior to him, he starts his donkey drills and eyewash, because he doesn't adhere to any professional standards daily — he only cares when someone is looking.

The feather merchant never hears the beat of the drum. He just watches other people, particularly those he thinks might get ahead, and he falls in step with them. He's always listening and watching. His thinking ability is short-circuited, because he's always in the receiving mode, antennae constantly moving, trying to determine from the signals he receives where he should go next.

The feather merchant likes big plans, the thicker and more detailed the better. And woe be to a subordinate who gets caught, usually by someone else, like the IG, for not complying with the plan: The feather merchant probably hasn't even read it, but he's willing to crucify the little guy who's not complying, even if his

own inadequate guidance is to blame for that little guy's failure to comply.

The feather merchant likes to look at his own signature, but he doesn't like to sign it often, because when he signs a paper that's supposed to mean he has read it and accepts responsibility for it.

The feather merchant checks his record brief twice a week for errors and calls MILPERCEN monthly to see if his most recent letter of commendation has arrived. He believes in awards — so much so that he has his subordinates continually writing him up for one. And he feels the same way about theirs: if one of them wants one, he can write his own recommendations.

The feather merchant won't sign a lost or damaged property statement, because someone has to pay for government property that is lost or damaged. Of course, he's not signed for any property. He lets someone else, usually at a lower rank, sign for it instead.

The feather merchant likes the word "patriot." After all, isn't he one? He has taken an oath to defend his country, to accept hardship and

privation for its good. What are all those *civilians* doing for their country? Here he is — a patriot — and they're taxing *his* base pay, too!

Everybody who works for a feather merchant knows where all the trouble is — at higher headquarters. At least, that's what the feather merchant says. (Of course, we can't say it in writing, but if it weren't for "them" maybe we could get our jobs done.) The damn higher headquarters is full of idiots! Because a feather merchant is usually frustrated in this regard, if he happens to be a colonel he likes to browbeat the lieutenant colonels and majors at that higher headquarters.

He also keeps his eye on the adjacent units to see if they're getting more than his unit is. Statistically, he can always prove they are, and that's why his staff gives him daily statistical updates for his massive ring binder. Besides, his boss may ask him a question.

Isn't it good we don't have any feather merchants serving as officers in our Army? I'm glad we live by the code of Duty, Honor, Country. I guess the Russians have all the feather merchants.



BRIGADIER GENERAL JAMES E. SHELTON has served in various staff positions, and his command experience ranges from company to brigade size elements. He presently commands the U.S. Army Fourth ROTC Region with headquarters at Fort Lewis, Washington.



RIFLE ZERO

CAPTAIN EVERETT MAYFIELD

There has been a good deal of discussion recently — in print and otherwise — about the Army's marksmanship training program and whether that program is turning out soldiers who can shoot accurately. Judging from much of that discussion, it is not. And one of the major problems with the program seems to lie in the fact that the soldiers do not really know how to zero their rifles.

There is far more to zeroing a rifle than merely firing it on a 25-meter range to obtain a battlesight zero. Basically speaking, zeroing, as well as all other aspects of shooting, involves five components — ammunition, target, distance to the target, weapon, and firer. Because none of these are absolutes, though, the degree to which each varies from a theoretical norm has a certain amount of influence on the overall probability that a soldier will hit his target.

Ammunition

Fortunately, ammunition is the least variable of the five components. The current service round, for example, the M193 5.56mm ball cartridge, is accurate enough so that it plays virtually no part in a soldier's hitting or missing a man-sized target. By Government specifications, the ammunition must fire a four-inch shot group or smaller at 200 yards. The round does that. In fact, it can be expected to fire a group with a mean radius of just over two inches at 300 yards when fired from a test rifle that

is secured firmly in place.

Besides, the ammunition is manufactured according to strict quality control standards, and samples from each lot are fired frequently so that its performance can be monitored. Great care is taken in packing, storing, and handling the ammunition to protect it from the effects of climate. An occasional faulty round might be encountered, but the vast majority of soldiers will probably never be aware that such faulty ammunition exists.

Target

For the soldier in combat, his target will almost always be enemy personnel. There may be occasions when he will need to fire at something else, but usually his intention will be either to hit another man or to suppress that man's fire. The opposing soldier may represent a perfect target — standing erect and motionless 100 meters away — or he may be a target that is extremely difficult to hit — only a small portion of his body may be exposed, or he may be moving.

Distance to Target

The distance to a target is a critical element, because the amount of error from a misplaced shot increases with the range and is influenced by three things. First, the simple deviation of a round from a straight line increases with the distance so that a round that misses dead center by three inches at

50 meters will be off by six inches at 100 meters and by twelve inches at 200 meters.

The second factor is the force of gravity, which affects the flight of the bullet more as the range increases, because as the bullet loses velocity it drops more over a given distance.

Finally, the most critical factor is the simple fact that a soldier in combat will seldom know exactly how far away his target is. On a known distance range a soldier is told the exact distance, and on a qualification range he can figure it out easily enough. But in combat he may miss a seemingly sure kill because he has not accurately estimated the range. All too often even experienced shooters misjudge ranges and miss their targets completely.

The Rifle

The M16 rifle itself is another component that must be considered in any discussion of proper zeroing procedures. The M16 is capable of delivering its rounds on a target at the ranges at which a soldier can expect to engage an enemy. It is true that, mostly because of its light weight, short barrel, and loosely mated upper and lower receiver groups, it cannot fire the tight shot groups that a target rifle can. But it was not designed to be a highly accurate target firearm; it was intended to be an effective combat weapon, which it is.

It should be kept in mind, though, that any time a soldier is issued a rifle

he must be familiar with it and aware of where his rounds will hit when he fires it. The only way he can do these two things is to get as accurate a zero as possible and to fire the rifle as often as he can.

The Firer

But the soldier who is firing the rifle is by far the greatest variable in the zeroing process. To begin with, a rifle fits each person differently, and this alone causes each soldier to view a rifle's sights from a different angle. Each soldier is also built differently and assumes a position that is a little different from that of any other soldier when he aims his rifle. Some soldiers put their eyes quite close to the rear sight of the rifle when they assume a firing position; others do not. If a soldier does not position his eyes in exactly the same place on the rifle every time he sights, his rifle's zero will change, because there will be a change in the angle at which he will view the alignment of the sights. The aiming point on his target will also change.

Even with the rather obvious differences between soldiers and between rifles, there are still some widespread misconceptions about zeroing a rifle. Some people think it is possible for one soldier to zero a rifle for another. Some even think that an especially good marksman should be able to zero the rifles for, say, an entire platoon, when the fact is that a soldier cannot even use the same setting to zero two different rifles he plans to fire himself; he must go through the zeroing procedures for each one.

As a first step toward improving marksmanship, then, both trainers and soldiers must understand all of these variables and the ways in which they affect zeroing a rifle. Some other tips might also help. From tests conducted by the U.S. Army Marksmanship Unit (AMU) at Fort Benning, for instance, if a soldier is forced to take a new rifle and does not have an opportunity to zero it, he might be better off to center the rear sight as prescribed in Field Manual 23-9 and fire the rifle with it centered.

At the same time, there are other things a soldier should know. Although the Army's training centers teach otherwise, the AMU has said that it takes from 32 to 35 clicks to traverse the rear sight on an M16 rifle from the right to the left side. The training centers teach that there are only 32 clicks on the rear sight of any M16 and that the proper way to center it is to move it all the way to the left and count back 16 clicks to the right.

Since there can be a variation of at least three clicks from rifle to rifle — and possibly even more — the training centers are teaching our soldiers to use a technique that has a considerable degree of error built into it. When this error is added to those caused by the normal variations encountered from weapon to weapon, the probability of zeroing different rifles with the same sight setting becomes quite remote. Of even more concern is the fact that most soldiers in the Army do not know what this means to rifle marksmanship.

NOT GOOD ENOUGH

There is no question that it is possible to hit a man 300 meters away with the M16A1 rifle, but "possible" is not good enough. We must attain something more. Our doctrine and our training programs must make certain that when a soldier fires his rifle he does so with a high probability of hitting what he shoots at.

All the factors mentioned earlier work against a soldier when he is firing; when other variables enter the picture his chance of a successful shot becomes even smaller. For instance, he may have to contend with wind, poor light, limited time to aim and fire, and fear or excitement. The very moment when all these things are working against him is the time when he most needs to be able to fire accurately.

Even if a soldier is firing under ideal conditions and is employing the fundamentals of marksmanship flawlessly, he will only hit what his rifle's sights and bore are lined up to hit. He may place all the rounds from a 20-round magazine within a 2-inch group at 300 meters, but unless the rifle is zeroed, that group will be off the target. And, of course, in combat he will seldom, if ever, have ideal conditions under which to fire.

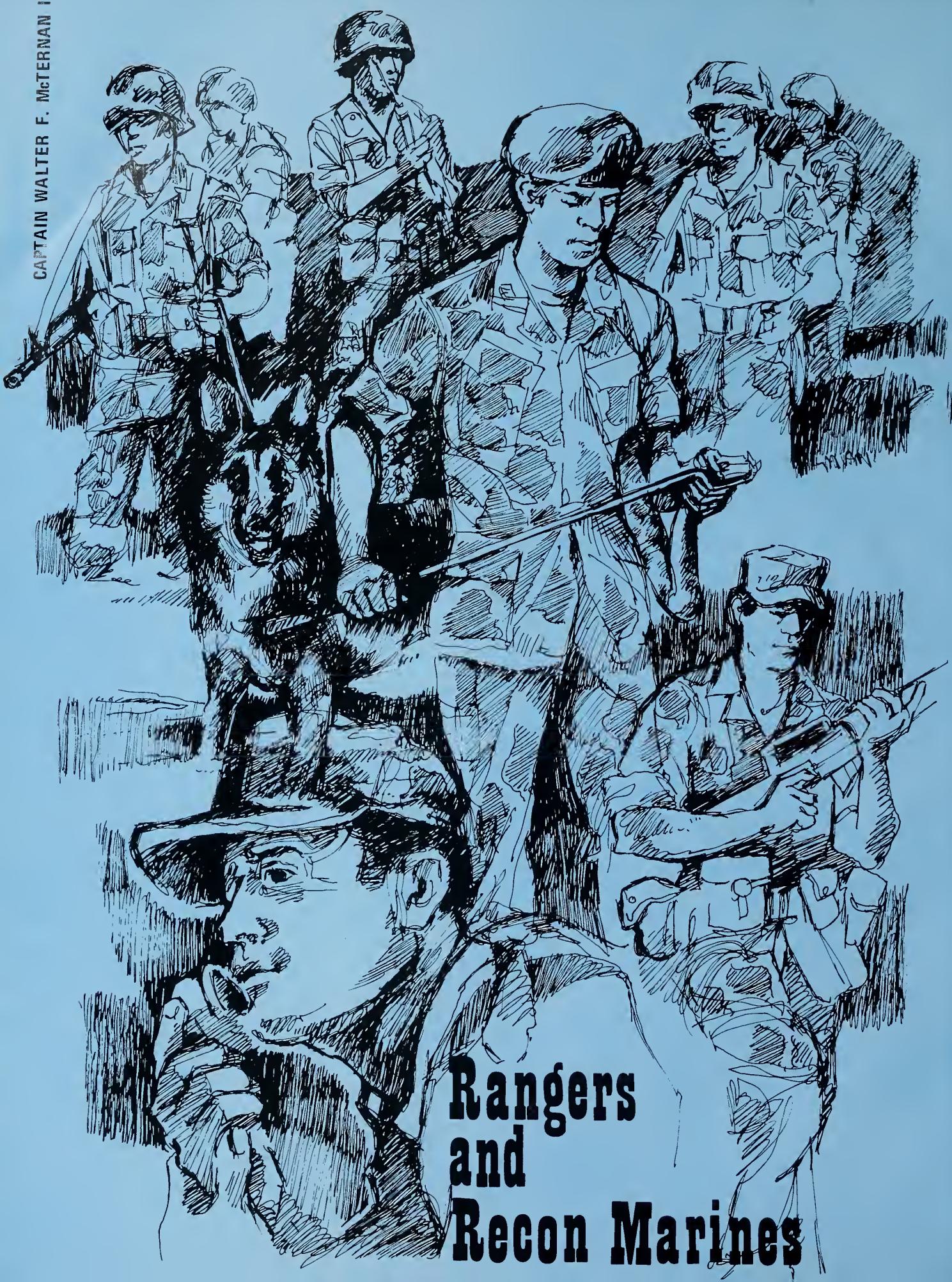
This means that in his initial marksmanship training, and in all the training that follows, the soldier must be made aware of the importance of a properly zeroed rifle. He must receive his training and guidance from personnel who understand the subject well enough not to perpetuate misinformation.

The particular point that needs to be disseminated throughout the Army is that to be a good marksman, a soldier must zero each rifle he fires. The confusion on this point has given too many soldiers an unfounded and undesirable lack of confidence in their basic weapon, the M16A1 rifle.



CAPTAIN EVERETT D. MAYFIELD, a former enlisted Marine, is a 1977 ROTC graduate of the University of Texas at Arlington. Also a graduate of the Infantry Officer Basic and Advanced Courses and the Airborne School, he is now commanding a basic training company at Fort Jackson, South Carolina. He has served with the U.S. Army Marksmanship Unit and has fired competitively with both the M16A1 and the M14.

CAPTAIN WALTER F. McTERNAN III



Rangers and Recon Marines

Whenever U.S. Marines and U.S. Army soldiers get together to argue over which service is better, the argument is likely to include a discussion of the relative merits of Marine reconnaissance units and Army Ranger units. Whether they ever admit it or not, they may find that there are many similarities between these specialized units and few differences.

While many people in the Army know something about the Army's Rangers, they probably know little about the Marine Corps' reconnaissance units. Both types of units date from the World War II era, and both are considered elite units.

Rangers rank among the best-trained soldiers in the world. Many soldiers in all kinds of units are Ranger-qualified, but there are only two Ranger battalions, the 1st and 2d Battalions (Ranger) of the 75th Infantry, both formed in 1974.

The missions of these Ranger battalions include conducting decentralized and limited combat operations anywhere in the world — raids, special operations, and long-range tactical reconnaissance, going in by air, sea, or land.

Soldiers must volunteer if they are to serve in either of these battalions, but not everyone who volunteers is necessarily accepted. First, they must submit to a records check, an interview, and a physical fitness test. They have to score at least 350 out of 500 points on the Army's physical readiness test. Before reporting to a battalion, the soldiers who are accepted must complete the basic airborne course. Then, after reporting, the new members must undergo the four-week Ranger indoctrination program (RIP). In it, they are given intensive instruction in unit standing operating procedures, weapons, and other essential military subjects.

All noncommissioned and commissioned officers must be Ranger-qualified before they join one of the battalions. Those below the rank of sergeant are sent to Ranger School at Fort Benning after they have had some experience in a platoon.

Every Ranger receives comprehensive training in a wide variety of martial skills, and the members of the battalion's reconnaissance platoon are given additional training in SCUBA (self-contained underwater breathing apparatus) and HALO (high-altitude, low-opening). All participate in an intensive physical training program that is designed to keep them in top condition.

Similar missions, similar training, and similar selection procedures apply to the Marine Corps' reconnaissance units.

The Fleet Marine Forces contain two types of reconnaissance units: force reconnaissance companies (Force Recon) and division reconnaissance battalions (Recon Battalions). Each of the Marine Corps divisions (three active and one Reserve) has a Recon battalion. Only two Force Recon companies are now in the force structure — one active and one Reserve. Consequently, to compensate for shortages in Force Recon capabilities, each Recon Battalion of the First and Third Marine Divisions has one "deep reconnaissance platoon." These platoons

are responsible for assuming the force reconnaissance mission in their operational areas.

Basically, the mission of both kinds of units is to conduct amphibious reconnaissance missions. The Marines define amphibious reconnaissance as "an amphibious landing conducted by minor elements, normally involving stealth rather than force of arms, for the purpose of securing information, usually followed by a planned withdrawal."

But there are minor distinctions in the missions performed by these two types of units. The primary mission of a Force Recon company, for instance, is to conduct pre-assault and deep post-assault reconnaissance operations in support of a landing force and its elements, while the primary mission of a Recon Battalion is to conduct ground reconnaissance and surveillance in support of a division and its supporting elements.

This difference can be important in terms of who is being supported by a reconnaissance unit. Theoretically, the landing force supported by elements of a Force Recon company need not be made up of Marines, though it usually is; it can be made up of U.S. Army or allied units, as well as Marines.

VOLUNTEER

To join one of these special units, a Marine, like his Army counterpart, must volunteer. The unit then screens his service record to determine his suitability, conducts an interview to ascertain his maturity, and administers a physical fitness test to evaluate his level of fitness and his motivation.

Selections are made from the volunteers on the basis of their physical and medical qualifications and a mental screening conducted at company level. This latter requirement is principally to evaluate attitude, temperament, and judgment. The decision to accept an applicant ultimately rests with the unit commander, whose principal concern is the Marine's resourcefulness, motivation, and maturity — all vital qualities in a man who must operate behind enemy lines as part of a small team.

Once accepted, a new Recon Marine begins a rigorous and intensive training program that consists of both basic and advanced individual and unit training. He attends the reconnaissance indoctrination program (RIP), in which he is introduced to basic reconnaissance skills and unit procedures.

Later, he normally attends the Amphibious Reconnaissance Course (ARC) at one of the Landing Force Training Commands. This course stresses basic individual and basic unit training. When he completes these two courses, the Marine becomes a member of a reconnaissance team, and back at his unit he and his teammates continue to receive extensive training in such subjects as scout-swimming, patrolling, intelligence, small-boat handling, communications, initial terminal guidance procedures, insertion and extraction procedures, and rough terrain mastery skills, such as rappelling and mountain climbing.

In addition, a Recon Marine may be chosen to attend such Army or Navy schools as Ranger, Airborne, Pathfinder, HALO, and SCUBA. Then he can share what he has learned in those schools by cross-training fellow Marines who have not had the opportunity to attend.

In the reconnaissance unit itself, a concentrated, demanding physical training program is conducted to see that the reconnaissance Marines are fit enough to operate independently and to move on foot over rough terrain carrying all their weapons, equipment, and supplies with them. The unit's PT program also emphasizes swimming (both surf and open water), running, and marching with heavy rucksacks.

FEW DIFFERENCES

It is apparent, then, that when Recon Marines are compared with Army Rangers, there are few differences and many similarities. Unlike its Marine counterpart, the Ranger battalion is designed to wage offensive combat, but its mission does include long-range tactical reconnaissance, which is the major task of the Marine reconnaissance unit. And subsidiary reconnaissance missions, such as the capture of prisoners, for example, are compatible with the missions of a Ranger battalion or elements of it.

Another minor difference is in training. Although the members of Army Ranger and Marine reconnaissance companies receive extensive training, the Rangers usually get more formal schooling than the Recon Marines do. Additionally, because of their wide-ranging missions, Ranger units receive a lot of specialized military training, such as cross-country skiing.

Formal schooling for the Recon Marines is more limited. Many members of a Force Recon company and a deep reconnaissance platoon are qualified military parachutists, and as many as possible are SCUBA-qualified as well. In the letter companies of the reconnaissance battalions, as many Marines as possible are also trained in

these special techniques. Although reconnaissance units use all available spaces allotted to them in courses that teach skills and techniques that are applicable to reconnaissance operations, these spaces are few in number. And because the Marine Corps does not operate its own special schools, it must rely on a necessarily limited number of slots in the special schools run by the other services, such as the Army's Ranger and Airborne and the Navy's SCUBA.

Actually, the similarities between these Army and Marine units are most striking. The men of both kinds of organizations are trained to operate behind enemy lines in the performance of their duties, and both use similar methods of finding the kind of men they need to fill their ranks, men with a high degree of physical stamina and presence of mind.

They also conduct similar training programs to prepare their men for their duties in the field. While their respective missions may differ, their methods of entering an objective area are often the same; members of both train to enter combat by parachute, by helicopter, by rubber boat, by foot, or by fin. The combat skills required are often the same as well. Both organizations are able to accomplish their missions because of their high state of training and because of the quality of their members.

Physically rugged volunteers, Army or Marine, these men have flair, esprit, self-confidence, and aggressiveness, and these traits will enable them to succeed at their difficult tasks on any future battlefield.

Elite is the word for them — Rangers or Recon Marines.

CAPTAIN WALTER F. McTERNAN III, USMC, is now serving in the 3d Reconnaissance Battalion, 3d Marine Division. A 1972 graduate of The Citadel, he has also attended The Basic School, the Amphibious Warfare School, the Basic Airborne Course, and the Defense Language Institute. He has served as a Marine Corps rifle platoon commander and an infantry company executive officer, among other assignments.





A SOLDIER

SUSTAINMENT TRAINING

The United States Army's approach to training has passed through several distinct phases during the past fifteen years or so. It was about that long ago that the Army's trainers came to the realization that performance oriented, or hands-on, training should be student- and not instructor-centered and that students learned better, in most cases, by actually doing the training tasks. At the same time, the instructors realized that a student's proficiency in a particular skill had to be verified, again preferably by having the student actually do it.

But many trainers did not appreciate all the ramifications of the tasks, conditions, and standards as they were spelled out in the Soldier's Manuals and the ARTEPs, which were then new on the training scene.

This attitude has begun to change. There is now a growing realization that if a soldier is expected to maintain his proficiency in a specific skill, he will need to be trained in that skill more often than once a year. What the Army needs today, many trainers believe, are training programs that are designed to sustain a soldier's proficiency rather than the kinds of annual training programs the Army uses.

Unfortunately, this idea is still not universally accepted throughout the Army. Nor is the idea of evaluating a soldier's proficiency several times a year, although this latter point is one that has been made repeatedly in several recent studies of the Army's training methods and programs.

Admittedly, the idea of sustainment training is an abstract one. No one can say for certain just how often it should be conducted. And it may nor may not sufficiently recognize just how important individual intelligence, motivation, or job knowledge are to a training program.

Take, for example, a class on training a soldier to set the correct headspace and timing on a .50 caliber machinegun. Fifteen years ago, such a class would have been largely instructor-oriented and a training inspector would have looked for an attendance report — to make sure all the soldiers who were supposed to be present were actually present — and for suitable training aids. The inspector probably would have been more concerned with the instructor's method of presentation than with what the students were getting from the class.

Five years ago, an inspector looking at the same kind of class would have made sure the proper tasks, conditions, and standards were being taught, and that the class had been scheduled on a prescribed frequency, perhaps once a month, or as often as that particular unit commander had determined it was needed. In addition, most inspectors would have felt that if the training was to be effective, everyone in the unit had to be present at the same time. Thus, the training inspector would have concentrated on verifying the training schedule and on determining personnel accountability.

Now consider three typical soldiers in today's Army who need the same instruction on setting the correct headspace and timing on the .50 caliber machinegun. You, their unit commander, have said that you want this particular bit of training to be conducted every month.

One of the three soldiers, let's call him Smith, is a highly motivated young man, probably Category III or Category IV, not well coordinated physically but certain that one day he will be the Sergeant Major of the Army. He listens carefully, and will practice something over and over again if he does not completely understand it. If you say you want him to do something, he will do it. Smith probably needs to practice headspace and timing once every six to eight weeks, rather than every month.

Next is Rogers, by every statistical measurement a "super soldier." He is a high school graduate and ranks either in Category I or Category II. Unfortunately, he is not mature and appears to have little desire to learn or to perform any better than he has to. It seems that half of what goes in one ear comes out the other without ever being interrupted by his brain. He is not necessarily a bad soldier, only an immature one. If you really want Rogers to know headspace and timing, you will probably have to refresh his skills at least once every two weeks.

Hernandez is the third soldier. He knows little English and prefers to read and speak in his native Spanish. Since you don't know Spanish, you really don't understand him. For certain, he doesn't understand you.

Each of these soldiers represents a particular training challenge, and they point up the fact that your carefully thought out sustainment training program for a particular skill simply will not give you trained, motivated soldiers. With that program, you are not training one of them often enough, you are probably training another more often than necessary, and you really cannot evaluate the training the third one needs until you find a satisfactory way of communicating with him. What can be done?

Too many of today's trainers, it is sad to say, are still process-oriented. That is, they make sure that the training schedule is correct, that all the soldiers scheduled to receive the training are accounted for, and that the instruction is presented in an organized, effective manner. The training itself, therefore, is procedural rather than substantive. In too many instances, training programs are designed to pass training inspections rather than to ensure that the soldiers, and the units, actually become proficient in the individual and collective skills they will need to survive on the battlefield.

We sometimes forget, too, that it is just as important for officers to practice their skills more frequently and to develop for themselves a sustainment training package as it is for Smith, Rogers, and Hernandez to practice setting headspace and timing. The Army simply has not paid enough attention to the training and sustainment of leader skills across all three areas of combat, combat support, and combat service support.

MAINTAIN STANDARDS

Sustainment training to a level of consistent proficiency, then, is a useful concept when it is contrasted with our current annual program in which proficiency only



reaches an occasional peak. It seems far better to reach a "high school" standard every few months and to maintain that standard all year — assuming it is the desired level of proficiency that permits a unit to accomplish its combat mission — than to train once a year up to a highly proficient but transitory "graduate school" level.

Admittedly, sustainment training is far more complex than this proposition suggests. It must be recognized, though, as being product-oriented, not process-oriented with different critical paths for monitoring, and its design must be sensitive to the various methods that are associated with training for different kinds of skills. Thus, the sustainment of crew proficiency on the ITV at night under a high stress situation while the crew is tired requires one kind of sustainment training. A second, different type of sustainment effort is needed for fairly complex MOSs such as that of track and turret mechanic (CMF 63).

There is nothing intrinsically wrong with training to the "graduate school" level. In fact, there is merit in giving a battalion an opportunity to do a full-blown combined arms live fire exercise or a division a chance to deploy on a Reforger exercise. In either case, whether or not the battalion or division can maintain a high level of proficiency over a period of time, it is important for the offi-

cers and noncommissioned officers in those units, during what is probably a formative period in their military careers, to take part in exercises that duplicate as closely as possible actual wartime requirements.

But the danger is that infrequent repetitions of an exercise will be translated into a belief that because the unit has reached a "graduate level" of proficiency that level reflects the unit's actual continuing level of training proficiency. This is certainly not the case. With the degree of turnover and personnel turbulence we have now, a unit can do well only those things it can do every few months, that is, to meet the "high school" standards.

While we need a real sustainment training program to maintain our standards, we must realize that the real purpose of sustainment training is to maintain a consistent level of proficiency. Furthermore, the frequency of our sustainment training programs must depend upon the nature of the skills in which our soldiers must be trained.

It is equally important for sustainment training to establish a measurable degree of proficiency that is to be attained at a specified frequency, a frequency set often enough that a unit commander simply cannot afford to neglect it.

In developing his particular training requirements, today's trainer can choose from a broad array of training

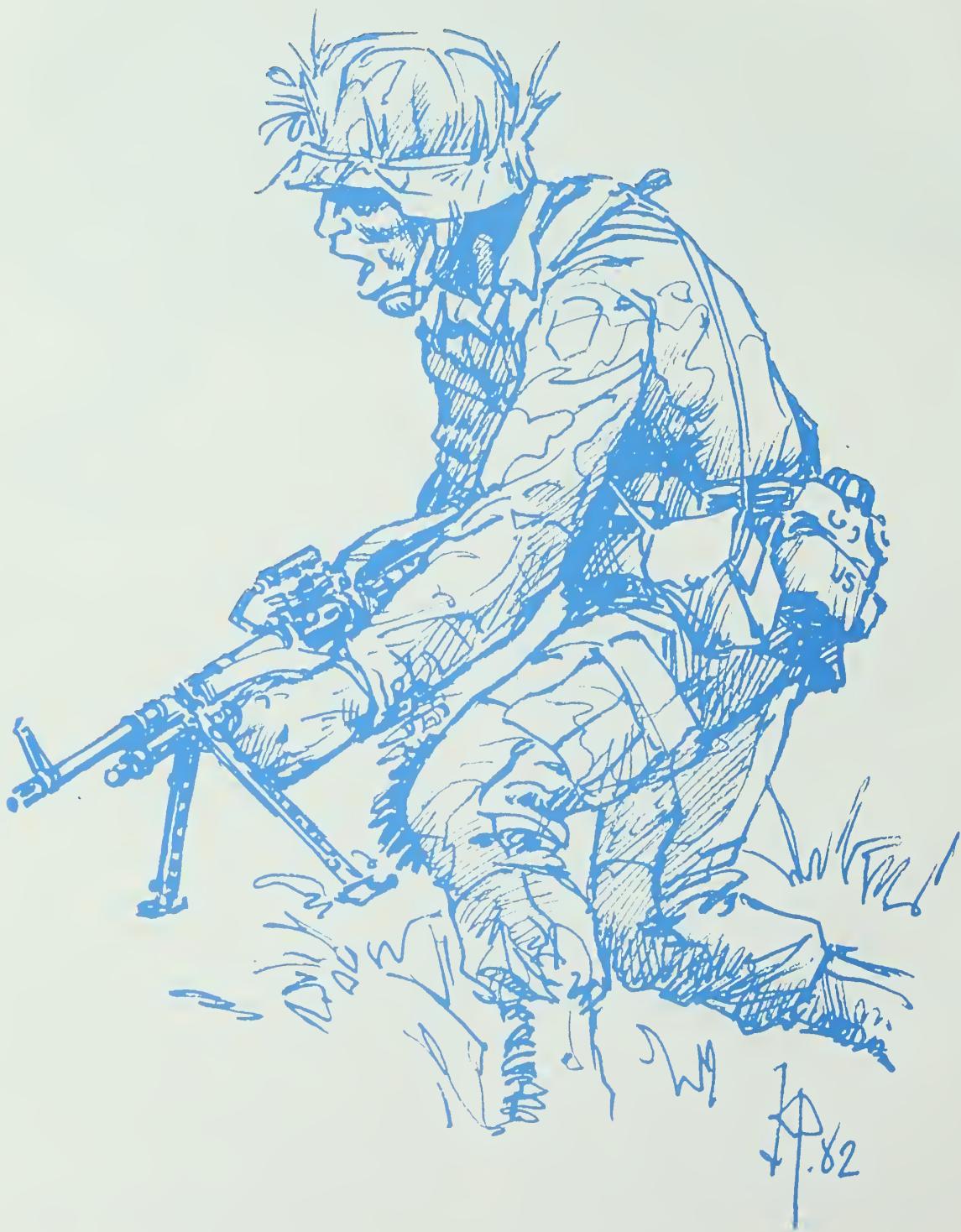
support items such as MILES (Multiple Integrated Laser Engagement System). But a major factor in determining what and how much to use must be the motivation of the unit commander, specifically the battalion commander. What he believes to be important is, by definition, important to the unit. Therefore, our commanders must be educated and trained in the use of the various training support items if we are to improve and further refine the sustainment of skill proficiency.

There is, of course, a great deal of training instinct involved when a trainer starts to choose his support material. Thus, if he wants to use some form of tactical

engagement simulation to sustain his soldiers' firing skills, he can choose from a number of target arrays, each of which can give him a distinctly different training challenge for his small units or crews.

The challenge to the trainer, then, is to ensure the quality control of the training environment so that the result will be well-executed battle drills as well as detailed after-action reviews that can be used to reinforce the training process.

Multiple repetitions of training events are exceedingly useful. For the average small unit live fire exercise, for instance, it is better for all concerned if the unit is first per-



mitted to conduct a dry run of its SOPs and procedures — in brief, a review of its battle drills. Then it should be given a chance to run, over the same course, an abbreviated live fire exercise in which it uses a reduced amount of ammunition. This kind of exercise should be used to point out to the unit's leaders and to the soldiers themselves the difficulty of properly controlling and distributing their fires, and it can be used to correct or to strengthen the unit's SOPs, if either is needed.

Finally, the unit should be put through a second live fire exercise, this time using its full allotment of ammunition. By now, the unit should be more than ready to demonstrate its competence, and its members should be brimming with confidence in their ability to run the exercise as it should be run. The unit should also conduct the same exercise, using live fire and the same training situation, at least twice during darkness.

The ammunition requirement for all of this is really not as high as it may seem. Four repetitions of an exercise do not necessarily require four times as much ammunition. In fact, the total will be closer to twice the usual allocation, because a unit will normally do a much better job of controlling and distributing its fires as it repeats the exercise. A unit doesn't have to fire a lot of ammunition to determine whether it has a serious control problem.

Evaluation is also a vital aspect of training, and each commander's evaluation program must be suited to his unit's mission and to his style of command.

One of the most difficult decisions a commander must make is to determine how often he is going to conduct external evaluations of training. Assume, for example, that in a certain division setting the headspace and timing of the .50 caliber machinegun is considered an absolutely vital task that must be sustained by all soldiers at a high level of proficiency. Assume, too, that that particular division commander believes the task is important enough that the proficiency of 10 percent of the soldiers must be evaluated on a random, no-notice basis once every three months.

With the division using a 10 percent figure, the brigades will undoubtedly establish a 15 percent figure, while a battalion's policy could range from 10 to 20 percent. As a result, somewhere between 35 and 40 percent of the time an echelon higher than the company will be verifying the proficiency of a company's soldiers in a very specific task.

This can be an intolerable situation for a company commander, because his training time is actually being governed by external evaluations. Having higher headquarters tell our young leaders not only what to do but also how to do it in great detail is not the best way to develop their confidence. And this kind of situation can only amount to a stressful command environment in which there can be little, if any, positive feedback.

What standards do we expect a unit to maintain? The Army now believes that 60 to 80 percent skill mastery is enough for qualification or verification of individual task proficiency in the SQT. But frequently, on evaluations such as the no-notice annual general inspection evalua-

tion, the Army's trainers are dismayed if a soldier does not reach a similar high level of proficiency.

Because proficiency can be maintained in just so many skills at one time, it would seem that a sliding scale of expectations is needed. Thus, the Army itself, or a unit's chain of command, should determine some sort of order of preference and the amount of warning that will be given before testing a certain skill proficiency. Thus, the standard set for the no-notice evaluation of a particular skill should differ from the standard established for a 48-hour notice, which, in turn, would differ from the standard set for a two-week notice. And any raising of a standard must be accompanied by additional resources (time and chain of command understanding included), or there will be a definite challenge to the leader's integrity.

Many commanders have a lurking desire to use training evaluations to inculcate a competitive spirit in their units. All commanders want to develop the highly competitive team comaraderie that is characteristic of good units. This is desirable. But when it is incorporated in the evaluation of an intensive training program, overt competition can be destructive. For this reason, the criterion-referenced nature of training should be stressed. That is, a unit should be able to do a task to the condition and standard required. It should not enter the picture whether one unit is better than another in terms of exceeding particular tasks, conditions, and standards. What is important is that units are suitably proficient in all of the tasks, conditions, and standards required by the training program.

There are most definitely times and places for tough, overt competition. But training and evaluation exercises are neither the time nor the place. Those exercises should be devoted to the development of competent and highly confident units that will be prepared on short notice to execute their general defense plan missions.

OVERVIEW

The current training system has great potential for highly effective proficiency training at the squad and crew level. The competence of the squad leader or tank commander is absolutely critical to successful training. This competence, combined with a supporting environment that can produce a disciplined, motivated soldier, is without question the essential variable in the sustainment of the requisite level of training proficiency.

To take full advantage of the new training support equipment now becoming available, proficiency in a range of skills, including crew proficiency, must be developed. These skills involve the use of ammunition as well as tactical engagement simulations both during the day and at night. The skills should include exercising the mobility and survivability that have been built into the combat system, as well as demonstrating proficiency in the integration of direct and indirect fire to achieve a desired battlefield effect. None of our current tank or antitank gunnery exercises really stress proficiency in this broad range of skills.



A detailed analysis of each echelon's collective task training requirements is badly needed. It may not be an efficient, effective use of resources, for example, to conduct a battalion task force road march without having previously exercised the component parts. The point is the subordinate echelons have many collective tasks that they need to accomplish well to ensure quality training. Furthermore, by sub-dividing the training into collective enabling tasks, the entire leadership chain can focus on training and evaluating the units on those enabling tasks and thereby increase the efficiency of their evaluations.

Similar logic applies to the exercise of integrated skills for officers. It may provide a warm, comfortable feeling to have a brigade or division headquarters in the field and effectively moving. But this is only an enabling skill in the execution of the much more important system integrating tasks — such things as the integration under stress of the division's maneuver, terrain reinforcement, and fire support systems. Too frequently, attention is paid to the movement of the headquarters, with its supporting elements, and not to the actual training situation. This is particularly true given the disturbing variation in the level

of training attained by our combat, combat support, and combat service support units.

As a general proposition, the Army as a whole has far more knowledge of the training requirements of its maneuver units than of its supporting units. Yet with the attrition that can be expected if war comes, the supporting units may have the decisive effect on its eventual outcome. These units must be able to regenerate combat power. The Army has much to do to develop this proficiency through combat service support exercises.

The modernization of the force is a significant event in any unit. As new equipment is made available, it becomes a major task to apply its capabilities to the general defense plan. For example, the receipt of a counter-mortar radar can cause a reevaluation and subsequent readjustment of an entire fire plan. The improved TOW vehicle can require a significant increase in professional training for our officers. All of this must be taken into consideration in the analysis and design of a training program to make sure a unit is not overlooked.

REQUIREMENTS

Special training requirements for conducting sustainment training itself also develop from the characteristics of the training system. For one thing, the proficiency of those who are going to conduct the training must be maintained regularly. Another recognized requirement is the sustainment of the battalion training management system (BTMS) in the context of the training objectives, resources, and programs of the particular chain of command.

A deliberate training policy decision is also needed in listing those requirements for maintaining unit training proficiency that can be institutionalized provided they are done often enough. One example of this would be understanding the difficulty involved in preparing a strong point. It is extremely difficult and time consuming, for instance, to put in a company strong point. It is probably not necessary that a company dig in every three or four months to maintain its proficiency, but there must be a system to ensure that there is either a CPX or an extensive professional discussion of the problem, or that it is actually done on the ground once a year. The particular chain of command must determine what is appropriate and, at intervals, jog the institutional memory.

The chain of command of a unit undergoing range training should be given the opportunity to provide any enabling task training to the soldiers. Thus, training support material can be issued to a squad or section leader so that he can train his soldiers or refresh their memories in the firing skills before the actual firing.

Another difficult training policy issue is how to centralize the evaluation of leader proficiency. At what echelon should specific requirements be established?

Who should conduct the training and for what purpose? This is a delicate issue of command policy that needs to be weighed against the centralization of sustainment training, planning, and execution, and against the scope of the command evaluation program itself. Needless to say, each must complement the other in reflecting the policy of the senior commander.

Learning Resource Centers at the battalion level have proved quite useful, when they were established properly. Each should have a trained monitor and should have the multiple capabilities of the training system (individual or group MOS study), the education system, and some aspect of entertainment (library, written, or audio-visual material). Sustainment training in some critical areas can be accomplished at the LRCs. With a new item of equipment or a new maintenance responsibility, for example, contract sustainment training can be provided by a skilled technician. At the same time, soldiers who have difficulty in reading should receive some help in improving their reading skills. This could be offered by the LRCs, provided they received the proper command attention.

EVOLUTION

The Army's training system has improved considerably over the years. The present system of multi-echelon integrated training is designed for the sustainment training of a force that has to be ready for combat on short notice. A supply of competent officers and NCOs is almost a precondition for executing this intensive training program.

The intensity of any training program is such that it must have total support. In other words, there must be a reinforcing system of annual general inspections, including the training proficiency tests, both scheduled and no-notice. There must also be solid equipment maintenance programs; continuing command attention to and discussion of the training management process; scheduled and detailed command training reviews; and time for assessing the programs, the available resources, and their results. In addition, there must be reinforcement by the chain of command and detailed professional discussions of the unit's training program.

Total system also implies the support of the community that surrounds the training process of the unit. This means there is a high order of discipline in all the things a unit is engaged in. It means there is an aggressive sports program to reinforce unit cohesion through company or battery competitions. And it means that barracks, motor pools, dining facilities, and family quarters are upgraded to a standard of excellence consistent with what is expected from the soldiers.

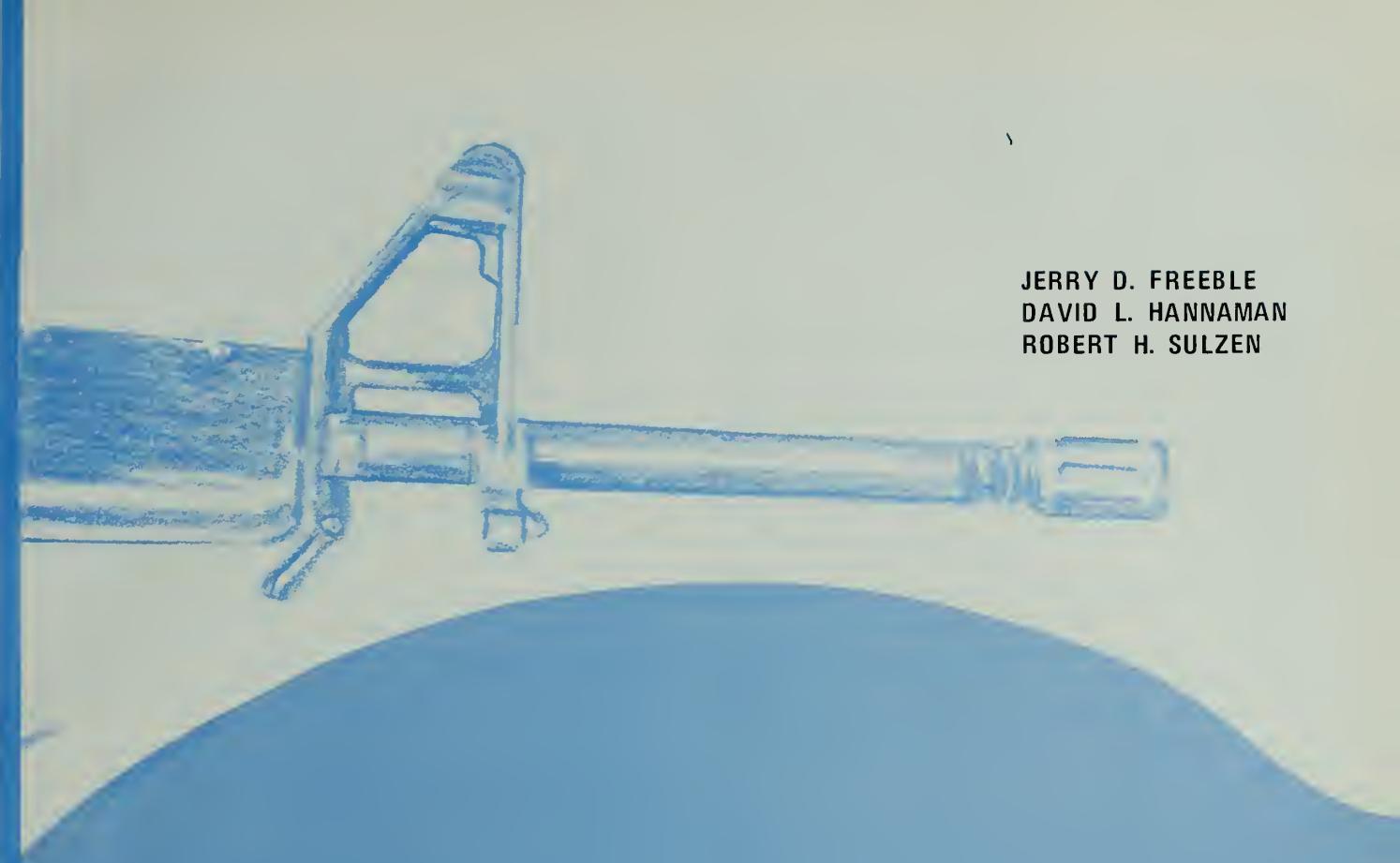
What is perhaps most important is that all the parts of the program must mesh if it is to produce the competent, confident young American who believes in his heart that he belongs to a skilled, tough, proud, disciplined, ready force that truly cares.



one-on-one tactical training

With its new Multiple Integrated Laser Engagement System (MILES), the Army can now conduct more realistic training exercises than ever before. Through the lasers and sensors on the weapons and the soldiers, MILES gives the soldiers a more realistic idea of what their fate would be if the combat were real. But even with MILES there are still some limitations.

One of the problems is that usually only a few soldiers in any unit really get involved in an action at a given moment on a particular piece of ground, while the best the others can do is to hear the sounds of the action or see it from various distances and perspectives. Thus, in a movement to contact training exercise, the platoon



JERRY D. FREEBLE
DAVID L. HANNAMAN
ROBERT H. SULZEN

leader, the squad leaders, and those in the point element may get some valuable training, while the rest of the platoon's members may benefit very little.

Another problem with unit combat simulations is that, given the variations in circumstances, it is difficult if not impossible for trainers to use any uniform standard to determine if a soldier is really doing well or simply doing the best he can.

The question for trainers, then, is how can all soldiers be given the opportunity to test their individual combat skills within a MILES exercise, and how can they be properly trained in those skills before the unit-to-unit MILES experience?

SMALL ARMS COMBAT TRAINING

To answer that question, a team from the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) and its contractor, the Human Resources Research Organization (HumRRO), developed a one-on-one training technique that was designed to provide repeated opportunities for infantrymen to practice their individual skills so that they could better participate in collective MILES exercises.

The technique the team developed called for pitting one infantryman armed with a rifle against another armed with hand grenades. The confrontation would take place on a measured lane according to two different scenarios: a grenadier in the attack versus a rifleman in the defense, and a rifleman in the attack versus a grenadier in the defense. The team then tested this new

technique at Fort Campbell in April 1981, using nine squads from the 101st Airborne Division (Air Assault). The squads were relatively small, averaging five soldiers each, not including the squad leaders.

(The team elected to use riflemen against grenadiers in this tryout because of a need to force grenade training and because of certain logistics considerations. But the same technique can be employed using riflemen against riflemen, with or without grenades.)

At Fort Campbell, the team set up its training area as a test lane with numbered markers on trees about ten meters apart. The line of markers let the graders for the attacker note the distances at which the opposing soldier took action. It also served to restrict the attacker's avenue of approach to an area five meters to either side of the markers.

This set-up added standardization by confining all the action to the same area. To add still more standardization, each rifleman was given only 20 rounds of 5.56mm blank ammunition, and each grenadier only four training grenades with fuzes.

Each grenadier was fitted with a MILES helmet and a torso harness so that the graders could keep track of any hits made by the riflemen. The rifles had MILES transmitters attached to them. (The riflemen did not wear MILES equipment, because their opponents had only grenades.) The usual MILES procedures for assessing grenade casualties were applied to the training — a grenade exploding within five meters of an exposed soldier was considered a hit.

The testing team was interested in getting the answers to two questions: What would the soldiers learn? And

would the training be motivating? These questions were straightforward on the one hand, yet extremely complex on the other; the answers were as expected in some cases, but surprising in others. What the soldiers did learn in a short time, though, was startling.

RIFLEMAN ATTACKS

During the rifle attack training, the rifleman was directed to proceed down the relatively narrow lane and to eliminate an enemy soldier who was armed with grenades and who occupied a one-man position. The attacking soldiers learned several things.

An attacking rifleman, for example, soon found he needed a practical approach to the concept of cover and concealment. At first, he would proceed cautiously down the lane until he spotted the grenadier, who had usually spotted him first. If he took cover behind a tree, the rifleman might find himself exposed to a grenade that had landed a few feet away. He would then realize that it was better to prevent the grenadier from detecting his exact location because, even though he did not have to worry about rifle fire, he could still be eliminated by grenades.

The value of three- to five-second rushes also became apparent when the grenadier showed confusion as a result of not knowing where the attacker was going. A confused grenadier would throw his grenades only where the rifleman had been last.

Along with this lesson, the rifleman learned the value of suppressive fire. Often a rifleman would fire a couple of rounds to make the grenadier duck, and he would then make a quick rush to some other cover, leaving the grenadier bewildered as to his exact location. The riflemen who took the training agreed that they had to be unpredictable, both to survive and to engage the grenadiers successfully.

With only 20 rounds available, conserving ammunition was essential, and this led to one-on-one tricks. One rifleman, for example, pretended he was out of ammunition, or that his rifle was jammed, by noisily working the bolt. When the grenadier stood up in his position to get a better throw at his apparently helpless victim, he was hit. Another rifleman fired a few rounds to make a grenadier keep his head down, but instead of finding a different position to fire from, he rushed the foxhole. When the grenadier popped up to see where the rifleman had gone, he was staring at the business end of an M16 rifle.

News of such tricks spread, and ingenious variations were evident from that point on, including the best trick of all — not falling for tricks.

RIFLEMAN DEFENDS

When a rifleman acted in a defensive role against a grenadier who was attacking, the rifleman learned additional skills. The rifleman would make sure that he used



cover and concealment properly until he had a good target. His use of suppressive fire was also interesting. He might hold his fire until the grenadier was in an awkward position and then pin him down, leaving him unable to do anything except throw grenades wildly. Soon, the rifleman could predict the behavior of the grenadier. For instance, one grenadier was behind a tree 25 meters away and did not have a clear throw. When a grenade sailed toward the rifleman, he ducked, but the rifleman knew the grenadier would probably rush for a better place. When the rifleman popped up, he was aiming at that "better place" instead of at the grenadier's previous location.

GRENADIER ATTACKS

Some interesting variations of the tricks occurred when a grenadier attacked a rifleman, because cover and concealment were important. A smart grenadier would proceed stealthily until he spotted the enemy or was spotted himself. If he could not effectively throw a grenade from this location, he would make short erratic rushes to a better position or break contact and approach from a better angle. He quickly found that while a thin tree might protect him from M16 fire, it might not give him the opportunity to throw his grenades properly.

One enterprising soldier discovered that his grenade could be used in an indirect way rather than in the direct line-of-sight, fast-ball approach. The trick involved spotting the rifleman in the foxhole, withdrawing a few meters to cover — hidden completely from the rifleman — and pitching a grenade in a high arc over the trees, achieving an air burst a few feet over the foxhole. Cooking off the grenades became standard after the first few members of a squad had theirs thrown back at them.

Another trick was to use more than one grenade at a time to suppress or confuse the rifleman. A grenade might be thrown from an awkward position in the general direction of the foxhole to cause the rifleman to duck. While the rifleman was down, the grenadier could get set for a well-aimed throw without fear of being hit.

Another way to use the grenade in a suppressive role was to throw one and maneuver to a better position while the rifleman ducked. It didn't always have to be a grenade, either. A clump of dirt or a rock would work, too, if the rifleman wasn't onto the trick.

GRENADIER DEFENDS

During training with grenades in the defense, cover and concealment could be used to the greatest possible advantage, because a grenade's origin wasn't as obvious as the muzzle flash from a rifle. Even when a rifleman knew a grenadier's position, if the grenadier anticipated the movement or the actions of the rifleman, he could be extremely effective with his grenades.

For example, the rifleman might fire a few rounds to get the grenadier to duck, and then he would maneuver to

a position from which to shoot him. But a battle-wise grenadier would have a grenade waiting for the rifleman at the next likely tree, and the grenade would blow up just as he got there. Once again, rocks instead of grenades were sometimes used to confuse the rifleman.

In another situation, a rifleman's trick led to counter-tricks by the grenadier. One of the grenadiers threw a grenade at a rifleman, but instead of rolling away, the rifleman charged the grenadier's position. The rest of the grenades exploded harmlessly behind the charging rifleman, who ran up and shot the grenadier. When that rifleman went back to his squad with his new-found tactics, the next few grenadiers suffered the same fate.

A platoon sergeant who was watching these charges talked quietly with a defensive grenadier for a moment and another trick resulted: The next time a rifleman charged, the grenadier, instead of throwing his grenades to explode ineffectively behind the rifleman, pulled the pin of one and set it just forward of the parapet of his foxhole and then ducked deep into the hole. As a result the confident rifleman ran up to the foxhole just in time to be hit by the grenade. That effectively ended the indiscriminate banzai charges.

MOTIVATION

By the end of this test, it was clear that the soldiers had become combat wise and that they had been motivated by the training. A high degree of motivation was expected, partly because of the "cops and robbers" nature of the training, but it was originally feared that poor performance and repetitiveness, both unavoidable in the technique, might adversely affect troop motivation. Surprisingly, these predicted pitfalls only increased motivation.

Success and pride showed on the faces of the soldiers who were especially good, and it was obvious, in many cases, that the other members of their squads viewed them in a better light. But failure was also motivating; those who performed poorly wanted to go through the training again to redeem themselves in the eyes of their comrades.

BENEFITS

Some additional and unexpected benefits also came from the training. In one case, for example, a squad leader acting as grader for attacking grenadiers watched one of his fire team leaders throw four grenades without once hitting the rifleman. The fire team leader was closing his eyes and throwing the grenade quickly after pulling the pin, and the squad leader soon realized that a fear of having the grenade fuze blow up in his hand was at the root of the problem. With that knowledge, the squad leader was able to give the soldier some corrective training and eliminate the problem.

Another squad leader was puzzled when one of his soldiers who had scored as an expert during his annual rifle qualification did no better in this training than others



who had scored much lower. The soldier's explanation was that on the range the targets didn't shoot back.

This concept of practicing individual skills in training situations where the targets shoot back, as they did at Fort Campbell, can be applied to training with other infantry small arms as well.

Some more systematic research and data analysis are needed before the specific improvement in skills from this training can be scientifically confirmed. But this type of individual training could overcome some of the difficulties associated with collective or unit training and also prepare individual soldiers better for such training.

In addition, the information regarding each soldier's individual ability to detect enemy forces at varying distances can help squad leaders and other trainers identify individual deficiencies, determine future training requirements, and assign individual responsibilities during unit missions. Another benefit is the insight the squad

leaders often obtain during their participation in one-on-one training.

Such training is practical because it does not require special terrain or a large amount of MILES equipment or of time; each run requires about five minutes per soldier. Two fire teams can practice attacking and defending in an hour on a single exercise lane.

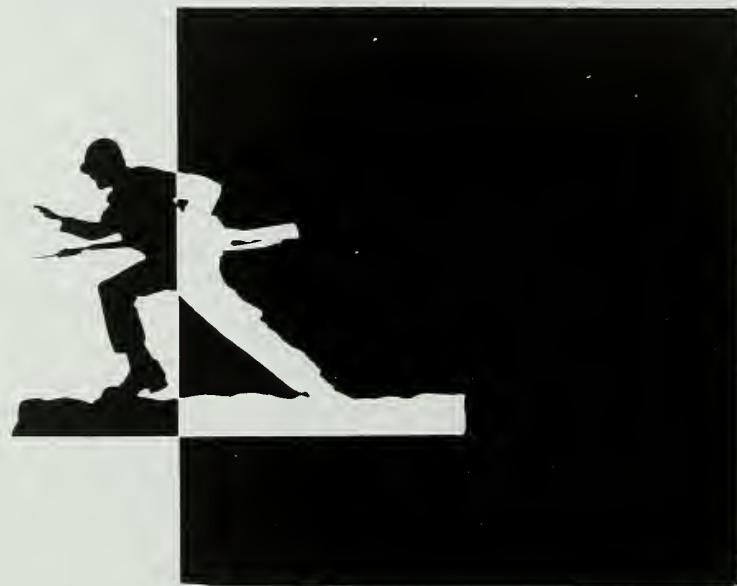
ARI will supply provisional scoring forms and draft rules of play to any unit that is interested in adapting the method to its own training needs. With further tryouts and an accumulation of lessons learned in the field, ARI could develop a standarized method with a set of progressive training standards.

Any recommendations, questions, or requests for additional information or documentation regarding this training technique should be addressed to Dr. Stanley Bolin, Project Director for Performance Standards Research, ARI, 5001 Eisenhower Avenue, Alexandria, Virginia 22333. Dr. Bolin can be reached by telephone at AUTOVON 284-8694.

JERRY D. FREEBLE, a Research Assistant with HumRRO, assisted in the development of the training techniques and with their field tryout at Fort Campbell.

ROBERT H. SULZEN, a Research Psychologist with ARI, has an extensive background in engagement simulation research. He was ARI's technical monitor of the contract under which these training techniques were developed.

DAVID L. HANNAMAN, a Senior Scientist with HumRRO, originally conceived and developed the one-on-one training techniques discussed here. He served for three years on active duty as an Army infantryman, including a one-year tour in Vietnam with the 25th Infantry Division.



TRAINING NOTES



CSC Commander

CAPTAIN JOHN NIXON
CAPTAIN CRAIG BENEDICT

Today's mechanized infantry battalion is undergoing a tremendous upheaval as all its resources and new equipment are being gathered for the great leap into Division 86. But Division 86 is several years away and, meanwhile, there are some unsolved problems in the present structure of the mechanized infantry battalion. The most controversial of these problems may be the delineation of the duties and responsibilities of the combat support company (CSC) commander.

The CSC commander has a unique and challenging position. He controls more firepower than any other company commander in the battalion, but instead of simplifying his job this firepower only complicates it because of the wide variety of vehicles, weapon systems, and military occupational specialties in the company. This organizational challenge, coupled with unclear guidance from the training and doctrinal literature, can leave the CSC commander confused as to his roles and duties on the battlefield.

Essentially, he is a kind of utility man for the battalion; he can be assigned to act either as a tactical commander or as a staff officer, or as

both at the same time. As utility man, he must know all the possible ways his company's assets can be employed, he must receive precise instructions, and, above all, he must be flexible.

Among his most difficult tasks are training and maintenance, because the CSC company includes soldiers with many different kinds of specialties. Besides being responsible for the sustained training of scouts, tank killers, and mortarmen, he may also be responsible for training air defenders, tankers, and ground surveillance radarmen. This means that he must be knowledgeable in each of these specialty areas.

A continual assessment of unit training, coupled with long range planning, can ease his training pressures and it will also help if the commander can see to it that only strong platoon leaders are assigned to the special platoons to act as his primary assistants. He simply cannot control all the training and its evaluation single-handed; the training must be decentralized if the soldiers are to be prepared to perform their duties.

When it comes to maintenance, the CSC has the smallest man-to-vehicle ratio in the battalion. A CSC com-

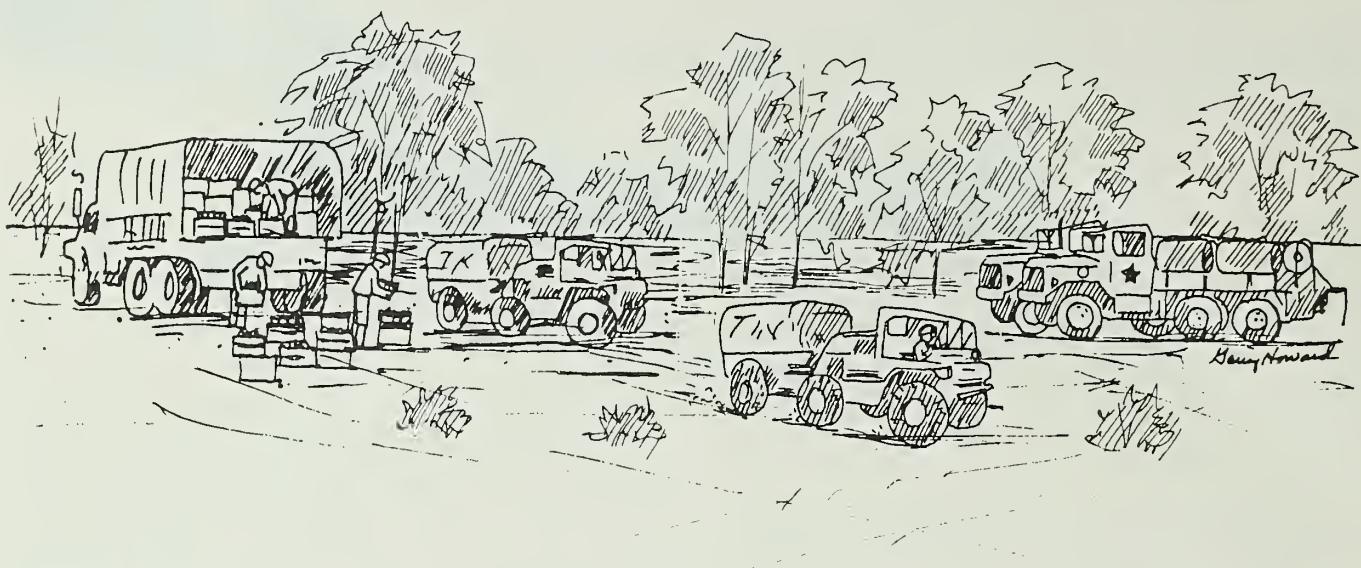
mander, therefore, may often feel that he spends most of his time in the motor pool or talking to the support maintenance battalion about the status of his downed weapon systems.

Although such training and maintenance concerns are a part of the responsibilities of any company commander, with the CSC commander they are unique in their variety and must be treated uniquely.

TACTICAL ENVIRONMENT

But the real problems arise when the CSC commander moves from a garrison to a tactical environment. TOEs, SOPs, and Army regulations guide the CSC commander's garrison duties, but neither doctrine nor policy covers him when he goes to the field. There he can be used either as a maneuver commander or as a special staff officer.

In a tactical environment, there are some missions that his company can do better than a mechanized infantry company, and in these situations, he can be used better as a maneuver company commander. In the defense, for example, a CSC can provide the security force for a battalion, using



its strong antiarmor assets (with additional security) and its reconnaissance assets to find and destroy the enemy forward of the FLOT (forward line of own troops). And if a battalion task force has an extended front, the CSC can be used to defend part of that front, providing particularly effective coverage of an armor avenue of approach. The CSC might also be assigned to act as a reserve unit, as a counterattack force, or as a counterinsurgency team.

In the offense, with augmentation, the company can act as an advance guard in a movement to contact, among other roles. The scouts' mobility, coupled with the TOW's long-range overwatch capability (again, with additional security), makes the CSC an ideal choice for such missions.

As a staff officer, a CSC commander is often not used properly. Because of his special qualifications, he should be considered a valued member of the battalion staff. He certainly should be treasured as an

advisor in the employment of any or all the special platoons in his company, and he could be used to establish and operate an alternate battalion tactical operations center (TOC). He might also be required to act as a re-transmission station between the battalion's forward elements and the main TOC, and he is an excellent choice to become a liaison officer to adjacent or higher units. (Although all of these are possible jobs for the CSC commander, he should not be given more than one of them at a time.) The selection of the right mission for him must be made on the basis of the mission of the battalion and the abilities of the CSC and its commander.

Whether the battalion commander chooses to use him as a staff officer or as a maneuver commander depends entirely on the situation and cannot be defined in field manuals or ARTEPs. But he should not be neglected, and his duties and responsibilities should be precisely spelled out for each operation. Above all, the

special knowledge and experience that he has should be used to the fullest extent to help the battalion accomplish its mission, whatever that mission might be.

CAPTAIN JOHN NIXON, a 1977 graduate of the U.S. Military Academy, is a training management instructor at the Infantry School. He, too, has completed Airborne and Ranger training and the Dragon trainer course. He has served as a rifle platoon leader and an antitank platoon leader with the 25th Infantry Division in Hawaii.

CAPTAIN CRAIG BENEDICT is commander of Company C, 1st Battalion, 58th Infantry, at Fort Benning, Georgia. A graduate of Southern Methodist University, he was commissioned in 1975 through the Officer Candidate School and has completed Airborne and Ranger training. He has served as a mechanized infantry rifle platoon leader, a scout platoon leader, and an operations instructor at the Infantry School.

INFANTRY and TANKS

CAPTAIN GUY C. SWAN III

As an Armor officer attending the United States Army Infantry Officer Advanced Course, I was surprised to find that many of my infantry colleagues had had little experience working with tanks. In particular, the officers just coming from airborne, air assault, Special Forces, and Ranger assignments knew little about employing and supporting tanks within a company team. At the same time, I found that those officers who had recently served in mechanized infantry battalions had an exceptionally good knowledge of combined arms operations.

As one of 12 Armor officers in the class, I was constantly pumped for information on the use of tanks. The instructors did a good job teaching the general employment of tanks as part of the combined arms team, but seemed to take for granted a level of experience that many of the officers did not have. Because of this, I answered many questions from my classmates about the real nitty-gritty problems of what tanks can and cannot do for the company team commander.

OPERATIONS

First and foremost, the tank is the *primary* tank-killing weapon system on the battlefield today. But because there is so much emphasis in today's infantry training on antiarmor guided missiles, this function of the tank is sometimes obscured. The company team commander, therefore, should

think of his tanks as his main tank-killers, and then supplement them with his antiarmor weapons as a particular situation requires.

All U.S. tanks also have sophisticated ranging and sighting components as part of their fire control systems. Their laser rangefinders, for example, can help the team's leaders set up their range cards, especially for their TOWs, Dragons, and machine-guns.

For battlefield illumination, most tanks still carry high intensity xenon searchlights, even though tankers don't like to turn them on for fear of compromising themselves. Certainly a tank's survivability is jeopardized whenever its searchlight is turned on, even in its infrared mode, but a team commander can use the light if he is careful. Perhaps the best way is to put the tank in a turret-down defilade position and reflect the light off the cloud cover. Although this method may sound odd, it can provide adequate illumination if the cloud cover is right.

Another piece of useful equipment on the tank — one that is often neglected in combined arms training — is the external telephone. An infantryman who is using the phone actually becomes a kind of fifth crewman for the purposes of observation and target acquisition. (For safety, the infantryman should remain clear of the rear of the tank and walk to the right flank where the tank commander can see him.)

The team commander must always make it a point to know the personnel

situation in his attached tank platoon. While a rifle squad can still function if a man is missing, a tank crew must have all its members to accomplish its mission. Because each crew member is responsible for certain critical tasks, the loss of one man can render the crew virtually ineffective. Therefore, tankers should not be used to man observation posts and listening posts except under emergency circumstances, although in certain situations they can and should be used to observe from their vehicles where they can take advantage of their sighting equipment and their .50 caliber machineguns.

In combat, as well as during some training exercises, infantry soldiers may have to be transported on the tanks. The infantrymen must maintain "three-point contact" at all times, and should climb onto a tank at the right rear sprocket or over the right front slope if it is either an M60 or an M48 tank, or over the left front slope if it is an Abrams tank. The tank commander should be able to see all of the soldiers before they climb aboard.

Finally, the tank platoon leader should be used as the team's armor advisor in much the same way the FIST team leader is used as the team's fire support advisor. The team commander should seek his advice on how he can best support the team's scheme of maneuver before making his final decision on how the tanks will fight.

The attachment of a tank platoon will create a number of logistical



problems that the company team commander will have to deal with. Tank turrets, for example, are hydraulically operated and need fire retardant hydraulic fluid. Tank brakes, unlike those on the M113A1, are also hydraulic and require brake fluid. While the tank platoon normally carries these fluids as well as oil and extra grease, the team commander and his executive officer should be prepared to get additional amounts if they are needed.

Repair parts for the tanks could also become a problem, particularly if the team's maintenance people do not plan for them. Today in Europe, some mechanized infantry companies are carrying certain key high-use tank parts on their PLL stockages.

Ammunition will also require some additional planning. Both the M48A5 and the Abrams tanks mount variations of the M2 .50 caliber machinegun that require the same close-link ammunition an infantry company's organic machineguns use. The M60 tank, however, mounts the M85 machinegun, which fires open-linked

.50 caliber ammunition that has been especially designed for it. (Almost all U.S. tanks also mount the M240 coaxial machinegun, but its 7.62mm ammunition is the same as that used in the M60 machinegun.)

Ammunition for the tank's main gun, on the other hand, is quite bulky and can take up a large part of the team's resupply space. Careful attention must be paid to how the team's ammunition resupply vehicles are loaded.

MAINTENANCE

When a tank platoon is attached to a mechanized infantry company, the commander of that company assumes responsibility for the tank platoon's organizational maintenance support. There are some steps a team commander can and should take before his team has to move out to lessen some of his maintenance worries. He should be sure his team's mechanics are aware of the basics of tank maintenance, since they will be the

ones who will have to repair the tanks. They might even visit a tank battalion maintenance setup and get some maintenance pointers they can use later. The company motor sergeant should certainly add some tank manuals to his library of maintenance and repair parts manuals, keeping in mind that tanks have separate manuals for the turret and the hull. The company executive officer and the motor sergeant should also see about getting any special tools the team may need.

Once in the field, the team commander must see to it that the tank platoon leader supervises the preventive maintenance procedures in his platoon; tanks require frequent maintenance checks if they are to operate properly.

Thrown tracks can be an embarrassing problem in training and a costly one in combat, and tanks have a nasty habit of throwing their tracks more frequently than other armored vehicles do. This problem can be reduced only if track tension is checked constantly and if proper ter-

rain driving techniques are enforced.

Because the team's organic M578 light recovery vehicle cannot recover tanks, the commander should plan to use operating tanks to recover disabled ones. Armor units do this fairly routinely, and the operator's manual prescribes the procedures for doing it safely.

CONCLUSION

Many of the things mentioned here may be old hat to experienced mechanized infantry officers. But for those officers who have had little or no mechanized infantry experience,

this advice may help to stimulate their thinking on the complexities of combined arms operations in general and

on tank-mechanized infantry operations at the company team level in particular.



CAPTAIN GUY C. SWAN III, an Armor officer, is a 1976 U.S. Military Academy graduate and has completed the Armor Officer Basic and Advanced Courses and also Airborne and Ranger Schools. He has served as a tank platoon leader in Korea and in several assignments with the 3d Armored Cavalry Regiment at Fort Bliss, Texas. He is presently assigned to the 3d Squadron, 5th Cavalry, at Fort Lewis, Washington.

TOW Training

**CAPTAIN STEPHEN BELLENE
CAPTAIN JOHN N. DAVIS**

The goal of our TOW training is to develop a TOW gunner who can hit tank targets, stationary or moving, in a tactical situation at ranges out to 3,000 meters. The best way to train a TOW gunner, of course, is to let him fire TOW missiles at heavily armored tank-like targets. Obviously, this is impractical. As an alternative, the Army has developed several training devices for use in training TOW gunners to hit targets without actually firing missiles. But these devices do not allow for tactical training, especially of tactical leaders. In fact, the training devices have numerous deficiencies.

The M-70 trainer, for instance, is the main training device for the TOW. It allows a gunner to track a moving target board, usually

mounted on a quarter-ton truck, and it scores him with a hit or a miss. But this tracking is normally done over ideal terrain with no obstacles such as trees, brush, power lines, or bodies of water between the gunner and his target. The target moves laterally to the firer on a smooth surface at a steady speed, providing the best exposure and tracking conditions. Obviously, no unit tactical training is possible with this device.

The Sony TV Trainer (TVT) provides a video tape recording of a gunner's performance as he tracks a target for a specific length of time. A detailed critique can be made when the tape is played back, but no hit or miss can be registered, and no immediate feedback can be given to the gunner. Again, this trainer cannot be

used for tactical training.

Although dry tracking may be good for individual practice, it provides no way for anyone else to evaluate a firer's ability to hit a target. One version of dry firing is available in Realtrain; a sighting device affixed to the launch tube allows an evaluator to track the target as the gunner does. This system does provide some realistic field training, but its evaluation is highly subjective. The quality of the results all too often depends on the evaluator's qualifications and judgment.

Laser instrumented training, on the other hand, offers a commander a good way to train his TOW crews tactically in a force-on-force exercise. It does something that no other TOW training aid can do: it rewards good

tactics and penalizes poor tactics. A TOW crew can now "kill" or "be killed" as a result of its own tactical prowess.

The most up-to-date laser instrumented system is the Multiple Integrated Laser Engagement System (MILES), which is being used at the National Training Center, among other locations. With it a commander can design his own training, and this is certainly the most effective way to do it. Any commander who gets a chance to use MILES should take it.

But MILES is not yet widely available. Meanwhile, there is an older system in use at Fort Hood that units at other locations can also use, under certain conditions, to train their TOW gunners. It is called the Weapons Engagement Scoring System (WEES).

Developed in the early 1970s, the WEES consists of an eye-safe laser, a laser detector assembly, a processing and control unit, a crew indicator panel, and a power supply. The laser itself is attached to the launching tube where it can be boresighted with the optical sight. The control unit is wired to the trigger mechanism. When the gunner fires, the control unit activates the laser, and this sends an infrared message containing the unit's identification number, the mode of fire, and the weapon type to the control unit.

If the attacking gunner has kept his sight on his target and if his target has not taken evasive action, a complete message is received and processed, and the control unit records a kill by lighting an orange strobe light and

disarming the laser. If, on the other hand, the attacking gunner has "lost" his target, or if the target vehicle has taken effective evasive action, the complete signal will not be received, and the control unit will not record a kill.

While WEES was designed for testing with late 1960s technology, its principles of operation are basically the same as those of MILES.

For more information on the

WEES and on how it can be made available, major commands may write to the Commander, TRADOC Combined Arms Test Activity, ATTN: ATCAT-OP, Fort Hood, Texas 76544, or call AUTOVON 737-9113/9994.

Instrumented training provides a solution for many of the problems of TOW training. It offers no tricks or games. But it does offer a solid proven way to improve TOW training.



CAPTAIN STEPHEN BELLENE is a graduate of the U.S. Military Academy, and when he prepared this article he was attending graduate school at the University of Virginia in preparation for an assignment as an instructor at the Academy. He has served as a mechanized infantry platoon leader and a company commander with the 2d Battalion, 12th Cavalry at Fort Hood, Texas.



CAPTAIN JOHN N. DAVIS, USAR, presently inactive, is a graduate student at the University of Pennsylvania. He is a 1975 graduate of the U.S. Military Academy and has completed Airborne School and the Air Defense Officer Basic Course. He has served with the 1st Cavalry Division and as Technical Program Coordinator with the TRADOC Combined Arms Test Activity at Fort Hood.



ENLISTED CAREER NOTES



REENLISTMENT POLICIES

Soldiers in all grades and MOSs now face new reenlistment rules.

One new policy — the Dual Component Option — deals with in-service recruitments and makes it easier for departing Regular Army soldiers to fill Reserve slots. Also included are new reenlistment and reclassification rules that should help the Army stay up to strength in certain critical specialties.

With the Dual Component Option, soldiers can now enlist in the U.S. Army Reserve 10 days before they begin their terminal leaves, or within 10 days before they are eligible to return from overseas. Service members who have finished their six-year military obligations no longer have to enlist within 24 hours of their ETS.

The new option helps soldiers who want to reenlist but who are not at the separation or transfer point or at another military agency at the time of their ETS. It also aids those who are not at the separation or transfer point for as long as 24 hours, such as overseas returnees. The option prevents a break in military service by letting these soldiers continue in their USAR status.

The new reenlistment and reclassification rules are also expected to improve the imbalance in certain specialties. Soldiers of all grades are barred from reenlisting or reclassifying from a shortage MOS to a balanced or overstrength one. But the policy does permit soldiers to reenlist in their own MOS vacancies, whether they are short, balanced, or overstrength.

One restriction specifically prevents staff sergeants and above from reclassifying from one shortage MOS to another, but sergeants and

specialist fives are now allowed to move from one shortage specialty to another on reenlistment. The only soldiers who are permitted to reclassify to a balanced or surplus MOS are those who become medically unqualified for duty in their present skills.

The rules may be tightened even further — sergeants and specialist fives who reenlist for a second or succeeding term may be placed under the same restrictions that now govern staff sergeants.

AIRBORNE PROMOTIONS

Temporary promotion procedures have been established for airborne soldiers in certain understrength positions to give them a better chance for promotion. Under the procedures, to be effective until 1 August 1982, promotion authorities will deduct 50 points for promotion to SGT/SP5 and 25 points for promotion to SSG from the monthly Army-wide promotion cut-off scores. This procedure pertains only to soldiers assigned to authorized positions calling for special qualification identifiers (SQIs) "P" (Parachutist), "S" (Special Forces), and "V" (Ranger).

The procedure is expected to increase promotion possibilities for several specialties that now face limited promotion opportunity because of Army-wide MOS overstrengths. These specialties are primarily in the combat support and combat service support fields.

Because the MOSs affected may vary from month to month, soldiers should check with their local personnel offices to see whether theirs are included.

Soldiers who are promoted under the temporary program will not be

allowed to move to a non-jump status assignment until they have completed a normal tour. Soldiers who are voluntarily removed from those assignments within one year of promotion will be involuntarily reclassified into a shortage MOS.

SOCAD IN EUROPE

Soldiers who are stationed in Europe may now take advantage of SOCAD, the Servicemembers' Opportunity Associate Degree Program.

Those who enroll in SOCAD receive college credit for their military training and experience while they work toward an associate's degree. They agree to follow a set curriculum with a "home" college or university. When they are assigned to a post away from that home institution, they continue their studies at another SOCAD institution that is a part of the same curriculum network.

Credits earned at these other institutions are sent to the home college or university, and it is from this institution that the soldier ultimately receives his degree.

Five institutions offer 11 SOCAD curriculum networks for more than 25 European posts. These curriculum networks are automotive maintenance, aviation maintenance, communications electronics, data processing, diesel maintenance, food service management, law enforcement, management science, office management, transportation technology, and a flexible curriculum for soldiers who are pursuing a general studies-liberal arts option.

About 44 institutions are already offering 16 SOCAD curriculum networks to soldiers stationed in the continental United States. These curricula include civil engineering, com-

munications media, computer maintenance, digital electronics, and medical records.

Soldiers who are interested in the program should ask their local Education Centers for more information on enrollment.

GENERATOR OPERATORS

The Army is looking for highly motivated soldiers who would like to become operators of electrical generators of 500 kilowatts or larger.

The U.S. Army Facilities Engineering Support Agency (FESA) offers a one-year course at Fort Belvoir, Virginia, to qualified soldiers. Those who complete this course are awarded primary military occupational specialty (PMOS) 52E (prime power production specialist) with an additional skill identifier in either mechanical (52), electrical (53), or instrumentation (54).

Applications are now being accepted for the class scheduled to begin 26 July. To be eligible, an applicant must be in the rank of SGT/SP5 or below, must agree to serve at least three years after completion of training, must have a GT/ST and EL score of 115 or higher, and

must have passed the basic math and science proficiency test administered through local post education centers.

For more information on the course and instructions on how to apply, any soldier who is interested should write or call the U.S. Army Facilities Engineering Support Agency, ATTN: Chief, Training Branch (FESA-MT), Fort Belvoir, VA 22060; telephone 703/664-5235/5241 or AUTOVON 354-5235/5241.

UNQUALIFIED FOR BERLIN

Of the soldiers who arrive for duty in Berlin each week, an average of three are not qualified for their assignments. These soldiers must then be reassigned somewhere in Europe, and this means that the Berlin Command loses its replacements. It also means that U.S. Army Europe (USAREUR), or another overseas command, must find a place for them.

The two primary deficiencies that make them unqualified are Article 15s in their records or GT scores below 80. MILPO message 081700Z Dec 81 reminds all MILPOs that personnel who are scheduled for reassignment to Berlin should be

screened carefully, with particular emphasis on these two criteria. AR 614-200, Table 8-2, Column 12, lists all the criteria that soldiers must meet to be qualified for duty in Berlin.

MOTOR SERGEANTS COURSE

The Army Ordnance Center and School has established an organizational maintenance supervisors' course for SGT/SP5s and SSGs in specialty 63B to prepare the students for motor sergeant positions.

The 11-week, self-paced course covers personnel management and supervision, maintenance and supply management, technical troubleshooting, tracked and wheeled vehicle and power generation equipment maintenance, materials handling equipment repair, and recovery.

The course is intended to fill a gap in training that previously existed between advanced individual training and advanced noncommissioned officer courses.

Any soldier who is interested in the course may write to Commander, Army Ordnance Center and School, ATTN: ATSL-DT, Aberdeen Proving Ground, MD 21005, or call AUTOVON 283-2779/2531.

RESERVE COMPONENT NOTES

Enlisted medical personnel in the Army Reserve are encouraged to apply for the 22-month Physicians' Assistant Training Program courses that begin in February and August 1983.

Physicians' assistants (PAs), working under the direction of a physician, provide limited medical care in combat support units and clinics. Under general supervision, they are qualified by academic and practical training to evaluate, diagnose, treat, and provide some patient services, thus reducing the physicians' workloads.

This PA training program consists of two phases. The first includes classroom instruction at the Academy

of Health Sciences at Fort Sam Houston, Texas, while clinical applications and experience at Active Army hospitals make up the second phase.

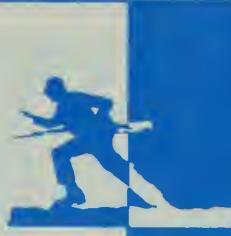
Medical personnel who are selected to attend will be advanced in rank to SGT/SP5 on the date the course starts, while those at higher ranks will retain those ranks. When they successfully complete Phase I, all students will be appointed to the rank of warrant officer. Some of them may be eligible for appointment as chief warrant officers when they complete the course.

To be eligible, enlisted medical personnel must have at least 36 months

of experience, must be a member of the Ready Reserve and not on extended active duty, must be eligible for appointment to warrant officer, and must have a high school diploma or GED equivalent, a minimum GT or ST score of 110 and a completed Clinical Proficiency Test.

Applications must be prepared in accordance with DA Letter 140-82-1, dated 1 September 1981, and must arrive at Headquarters, Department of the Army, before 1 September 1982. Additional information on the program is available from Ms. Wanda McGrew at (202) 325-8480 or AUTOVON 221-8480.

OFFICERS CAREER NOTES



BRANCH CHIEF COMMENTS

The U.S. Army Infantry Center, in coordination with Infantry Branch at MILPERCEN, has published the 1982 edition of "The Infantry Branch Newsletter." Ten thousand copies have been published and distributed to battalion level throughout the Army. We hope that each Infantry officer will see a copy and share its contents with others. The newsletter tells you what we at Branch see as our tasks for the remainder of 1982.

We cordially welcome new lieutenants as they begin their Infantry careers. About 1,000 of them in 1982 will report to active duty at Fort Benning to attend the Infantry Officer Basic Course and other military schooling before they join their units in various parts of the world.

These lieutenants should spend their early years developing the fundamental skills that will enable them to command Infantry companies. Their normal assignment progression will be to serve in the field for three years and then attend the Advanced Course. After completing IOAC, if an officer has not commanded a company, he will be assigned wherever a command opportunity exists. Our goal is to attain branch qualification for every Infantry officer, and qualification means command and attending IOAC.

It is important to note that an officer should not be assigned to a command until both he and his commander are sure he is ready to meet the test. And, because of the number of Infantry captains who are competing for commands, Infantry Branch is not supporting requests for a second command.

Post-branch qualification assignments for captains are service school instructors; ROTC, USMA, ARMR,

or USAREC assignments; or additional specialty training, followed by developmental assignments.

Majors serve tours in both of their specialties and complete staff level schooling. We advise those majors who are not selected to attend a resident course at one of the staff colleges to enroll and complete an appropriate non-resident course of instruction.

Lieutenant colonels also serve in both of their specialties. A small percentage of these officers will attend a resident course at a senior service college. Again, those lieutenant colonels who are not selected are encouraged to apply for participation in the Army War College corresponding studies program.

The remainder of 1982 will see the continued development of such new personnel initiatives as the Regimental System and the automation of preference statements. All Infantrymen should keep abreast of these actions, and stop by to visit us when they can.

COL JAMES A. SULLIVAN

INFANTRY BALL

The Tenth National Infantry Ball will be held on 13 November 1982 in Washington, D.C., and will have as its theme, "1982 — The Year of Progress." The officers assigned to the Infantry Branch, MILPERCEN, are the executive agents for the Commandant, United States Army Infantry Center, who is the ball's official host.

Once again a Distinguished Doughboy Award will be presented. This award was created in 1980 and was first presented to Mr. Bob Hope. The gold-plated, World War I helmet is presented annually to a citizen who

has made a direct, significant contribution to improving the morale and welfare of the Infantryman.

The Chief of the Infantry Branch presides over a nominating committee, which prepares a list of nominees. This list is then forwarded to the Commander of the Infantry Center for his review and final selection of the individual who will be given the award. The criteria used for selecting the recipient are:

- The award is presented to an individual, not to an organization, in recognition of his direct efforts to aid the Infantryman.
- The award is not presented posthumously, except when the recipient dies after he has been selected but before he has been presented the award.
- Active duty military personnel are not eligible.
- Civilian executives who are active in the defense establishment are not eligible.
- The individual nominated for the award must not be directly involved or organizationally affiliated with defense industry contracts.
- The recipient of the award does not have to be present to accept the award.

CHANGE OF COURSE SITE

One of the three sites that have been used for the active duty phase of the Reserve Component Command and General Staff Course has been moved to a new location. The northern site, previously located at Fort Indiantown Gap, Pennsylvania, has been moved to Wesley College in Dover, Delaware. The other two sites remain the same: at the University of Southern Mississippi in Hattiesburg and at the University of Nevada at Reno.

BOOK REVIEWS



Once again we call your attention to several fine books that we have received in recent months, all of which you should find professionally rewarding.

In the general reference category are the following:

- **WEAPONS AND TACTICS OF THE SOVIET ARMY**, by David C. Isby (Jane's, 1981. 384 Pages. \$34.95). This is an outstanding piece of work in which the author concentrates on the Soviet combat arms. Not only does he discuss Soviet weaponry in some detail, he also writes about the tactics the Soviets use with those weapons. He has included, for example, separate chapters on command and organization, the offense, the defense, and the men and equipment behind the weapons. The book contains several hundred black-and-white photographs and some 40 line drawings.

- **INTRODUCTION TO BATTLEFIELD WEAPONS SYSTEMS AND TECHNOLOGY**, by R. G. Lee (Brassey's, 1981. 198 Pages. \$15.00, Softbound). The author is the military director of studies at the British Royal Military College of Science. Although this book is one of a series of course manuals prepared specifically for use at the college, it can be most useful to anyone who wants to improve his knowledge of military weapons and equipment and how those items are designed. Self-help questions are found at the end of each chapter; the answers to the questions are grouped at the end of the book.

- **THE BALANCE OF MILITARY POWER**, edited by Ray Bonds (St. Martin's Press, 1981. 208 Pages. \$24.95). This book features the writings of four specialists and has been produced to give "facts, figures and details on one of the most

critical topics of our time, the balance of forces between East and West, between the Warsaw Pact and NATO." It does that job quite well.

- **ARTILLERY OF THE WORLD**, Second Revised Edition, edited by Shelford Bidwell (Brassey's, 1981. 246 Pages. \$49.50). This is a fully revised and updated version of the 1977 publication, which ranked with the finest of its kind. This one surpasses the previous book in several respects. There is more to the book than a mere discussion of artillery pieces, for there are chapters on heavy mortars, battlefield surface-to-surface missiles and their ancillary equipment, antitank guns and guided missiles, air defense weapons, and coast defense artillery, of which there are not many pieces left. The book also includes a glossary of terms, a directory of manufacturers of artillery equipment, and an index.

- **THE FIGHTING MAN**, by Peter Young (Rutledge Press, 1981. 240 Pages. \$29.95). The author is one of England's distinguished soldiers. Now on the retired rolls, he has gained prominence as one of his country's foremost military historians. In this book, he concentrates his attention on the men who served in the ranks of the world's military forces from the time of Alexander the Great to the present, and on their tactics, their weapons, and their achievements. When you have finished the author's narrative turn again to Haim Laskov's introduction. It is an outstanding piece of writing about today's infantryman — what he can expect on tomorrow's battlefield, how he should be trained and led, and the importance of leadership.

Here are a number of other books in various categories:

- **THE JEEP**, by J. G. Jeudy and Marc Tararine (Editions Vilo, 1981.

272 Pages. \$21.95). In this profusely illustrated book, the authors pay homage to one of the world's great military vehicles, the American jeep. They discuss its ancestors, its history and the origins of the word itself, the jeep in World War II, and the jeep in the French Army. They also give their thoughts on the jeep's future, which seems dim in the light of recent vehicle tests in the United States and abroad. It appears the venerable old warhorse may be on its way out.

- **FORT BLISS**, by Leon C. Metz (Mangan Books, 1981. 180 Pages. \$34.95). You could almost call this book a labor of love, for the author, who has lived in El Paso since 1952, long has had an interest in western history. Here he combines a good narrative with photographs from the collection of Millard G. McKinney (also a recognized authority on western military history) to tell the story of Fort Bliss from its founding in 1849 by Major Jefferson Van Horne and units from the 3d Infantry Regiment to the present day. The narrative is aided by numerous side-bars of information that are peripheral to the main story. The photographs are simply outstanding. Today, as the author points out, "Fort Bliss is one of the oldest, largest, and most important military bases in the United States."

- **THE SHARP END: THE FIGHTING MAN IN WORLD WAR II**, by John Ellis (Scribner's, 1980. 396 Pages. \$17.95). Drawing on a host of secondary sources, the author, a British military historian, attempts to show how British and American ground combat soldiers reacted to wartime stimuli. In general, he has done a good job, and his book is worth an infantryman's study. But the U.S. Army's ground combat soldiers fared a lot better in northwest

Europe than Ellis claims. One thing does come clear: the war was not the same for the combat soldier in the different theaters of operation.

• THE FALL OF FORTRESS EUROPE, 1943-1945, by Albert Seaton (Holmes and Meier, 1981. 218 Pages. \$24.50). The author is also a British military historian who has written extensively in the field. In this book, he looks at the war from the German viewpoint, and at the failure of Hitler's *Fortress Europe* to hold out against the onslaughts of the Allied armies from east and west. Seaton lays most of the blame on the German military system and its high-ranking generals. To Seaton, "the single common factor amongst the high-ranking generals that came to terms with Nazism was that they were eager for advancement and, notwithstanding what any might have said after the war, they had at one time been Nazi supporters and admirers of Hitler; few among them were men of political or strategic perspicacity or of any great strength of character, for ambition or lack of courage blinded most of them to the demands of conscience and moral responsibility." As a result, he feels, they never understood Germany's military limitations or the strength of the coalition of people that formed to oppose them.

Now for a number of our longer reviews:

AT DAWN WE SLEPT: THE UNTOLD STORY OF PEARL HARBOR, by Gordon W. Prange (McGraw-Hill, 1981. 875 Pages. \$22.95). Reviewed by Colonel Robert G. Clarke, Office of the Joint Chiefs of Staff.

The late Professor Gordon W. Prange spent 37 years researching and then writing this book. In his smoothly flowing narrative, he examines in great detail the political and military events surrounding the Japanese attack at Pearl Harbor on 7 December 1941. His is a fascinating story told lucidly and completely.

The author's effort has added a rich dimension to an important military issue. He has cut through most of the knotty issues and clearly puts

to rest several popular myths about the attack. At the same time, he has unearthed valuable new material to give us a better understanding of what really happened.

This book is an epic worthy of a place in every military professional's personal library. It is undoubtedly the most definitive work yet on this major event in U.S. history.

ELECTRONIC WARFARE: ELEMENT OF STRATEGY AND MULTIPLIER OF COMBAT POWER, by Don E. Gordon (Pergamon Press, 1981. 104 Pages. \$16.00) Reviewed by Lieutenant John J. McGrath, Fort Benning, Georgia.

The more that is revealed about ULTRA the more apparent becomes the complete failure of German strategic intelligence during World War II. ULTRA, essentially, was electronic warfare, and its importance to the Allied war effort is just now coming to the fore.

The author is a serving U.S. Army officer who has had extensive experience in both the intelligence and electronic warfare fields. He has written this book because he believes that NATO must control the electromagnetic spectrum, both on the strategic and the tactical levels, if it is to win the next war. He uses historical examples, the present missions of the U.S. armed forces, and the threat posed by Soviet electronic capabilities to back up his main point. He succeeds quite well.

Since 1973, the U.S. Army has been revamping its intelligence capabilities to meet the threat of extensive electronic warfare operations. The author has been deeply involved in that effort. His book, thus, is meaningful and authoritative, one that should be read by all professional soldiers.

CHOSIN: HEROIC ORDEAL OF THE KOREAN WAR, by Eric Hammel (Vanguard, 1981. 457 Pages). Reviewed by Major J.F. Holden-Rhodes, United States Army Reserve.

The author, as he puts it, is interested in "the men who fight battles, and not in their leaders, nor particularly in the battles themselves." He was trying, he says, "to find a subject by which I could impart a depiction of the agony of defeat." With superb skill, he accomplishes his objective in this book. His weaving of men, crises, and numbing cold leaves the reader in awe of this feat of arms in which soldiers and Marines fought an epic struggle to survive.

The book has no pictures; it does not need them. The author has painted a word story that one can compare favorably with the dramatic photographic work of David Douglas Duncan, who portrayed the fighting in Korea. Maps do appear at the appropriate times to further the story's flow.

Hammel's book is highly recommended to both the soldier and the Marine.

SOVIET-AMERICAN RELATIONS IN ASIA, 1945-1954, by Russell D. Buhite (University of Oklahoma Press, 1981. 254 Pages. \$14.95). Reviewed by Major C.T. Guthrie, Army Advisor, Washington Army National Guard.

This book is not for the casual reader of foreign affairs. Rather, it should be read by the student of international politics who has some background knowledge of Asia.

The author describes Soviet post-World War II expansionist efforts in Asia, which included establishing hegemony in Mongolia, Sinkiang, and Manchuria; controlling the Kuril Islands and Sakhalin; dominating Korea; assuring a militarily weak Japan; and establishing a Chinese client state under communist control.

U.S. response to the Soviet Union's moves during this period rose from a desire to limit Soviet expansion. Although U.S. policy makers accurately interpreted Soviet goals in the area, those same officials failed to properly define vital U.S. national interests. Because of judgment errors, the U.S. militarized its major nation-

al interests, which ultimately led to wars in Korea and Vietnam.

The author argues that neither Korea nor Southeast Asia represented vital U.S. interests. If the reader accepts this, then he will have to agree that the author has established strong support for his argument.

Unfortunately, some of the author's conclusions seem thinly based on reality, and his argument that U.S. policy toward Asia did not have to be re-examined after Korea and again after Vietnam seems shallow and somewhat controversial. Still, his book is worth the consideration of any student of Asian affairs.

SOVIET PERCEPTIONS OF MILITARY POWER: THE INTERACTION OF THEORY AND PRACTICE, by John J. Dziak (National Strategy Information Center, 1981. 72 Pages. \$5.95). Reviewed by Captain Don Rightmyer, USAF Directorate of Soviet Affairs.

The title of this excellent monograph regrettably clouds the fact that the subject being discussed is the Soviet view of military power as well as how the Soviets write and think about it. There is a great tendency in the West to think that the Soviets perceive military power as we do. This is not accurate, and the author blasts holes in the concept.

He first looks at the development of Soviet military power since the October Revolution of 1917 and shows that a military buildup has been underway in that country over several decades, not just during the last 10 or 20 years. He then examines the system that formulates and implements Soviet military doctrine and operations. He rejects any argument that "hawk/dove" elements exist in the Communist Party's senior leadership. He also holds that the writings of Soviet military officers cannot be dismissed as being different from the Party's intents because all military publishing houses are controlled by the Party's Central Committee. Thus, military writings, open or restricted, represent the beliefs of the Party or

they would not be printed.

This book, then, examines a critical but little understood factor of the Soviet military establishment — its idiom and what the Soviets mean by such terms as doctrine and strategy.



The author provides a concise, clear explanation of these key elements in Soviet military thought. Without understanding these, one cannot hope to grasp the meaning of Soviet military writings.

The book is well documented and contains a glossary of the different Soviet institutions involved in their doctrine formulation process. It is just the right length to allow a reader to digest it several times.

WAR ON THE EASTERN FRONT, 1944-1945: THE GERMAN SOLDIER IN RUSSIA, by James Lucas (Stein and Day, 1980. 214 Pages. \$16.95).

It's a little hard to describe this book, or to establish its value to a military reader. It is not a history of the war on the Eastern Front; it does not follow any particular chronological arrangement. It is, simply, as the author puts it, "a random selection of personal experiences" drawn from interviews, diaries, unpublished manuscripts, and the like. A few selections are drawn from official German documents and handbooks.

Most of the events took place between 1944 and 1945, and much of the material can be found in the series

of German pamphlets produced by the United States Army after World War II, pamphlets that were based on the German experiences against the Russians.

Some of the most interesting sections of this book are those that deal with the German use of self-propelled guns and rocket artillery, and the German solutions to the problems of winter warfare.

CREATING THE ENTANGLING ALLIANCE: THE ORIGINS OF THE NORTH ATLANTIC TREATY ORGANIZATION, by Timothy P. Ireland (Greenwood Press, 1981. 245 Pages). Reviewed by Colonel James B. Motley, Office of the Secretary of Defense.

This is a well-written book, organized into a brief introduction, six chapters, an eight-page conclusion, and a five-page bibliography. It amply fulfills the author's purpose, which is to provide insight into "the importance of traditional intra-European politics in shaping the particular nature of the U.S. commitment to Europe through the North Atlantic Treaty and NATO."

Ireland, an adjunct assistant professor at the Fletcher School of Law and Diplomacy and coordinator of the International Relations Program at Tufts University, suggests that U.S. historians traditionally concentrate on the development of the Cold War when they analyze NATO. This kind of analysis, Ireland argues, overlooks the fact that the United States' commitment to western Europe through the Atlantic Alliance was designed to accomplish two goals: to counter Soviet subversion and to enable western Europe to recover from the devastating effects of the war and then recreate a balance of power in Europe.

The theme of this book is that in order to restore western Europe as a "balancing factor" against the Soviet Union, the U.S. had to press for the inclusion of West Germany in programs for European recovery and defense. But to satisfy France and

other west European countries against the threat of German revanchism, the U.S. had to involve itself in European affairs. Thus, the "German question" did much to determine the scope and structure of the U.S. commitment to NATO and is really the rationale behind the continuing U.S. presence in NATO.

This is a highly recommended book for both the specialist and the general reader.

**OUR ENEMIES THE FRENCH:
BEING AN ACCOUNT OF THE
WAR FOUGHT BETWEEN THE
FRENCH AND BRITISH, SYRIA,
1941, by Anthony Mockler (Shoe-
string Press, 1981. 252 Pages.
\$18.00). Reviewed by William
Brooks, Wrightsville Beach, North
Carolina.**

The French are probably the most politically perverse people in Europe, and they seem to become even more perverse when a discussion turns to World War II. This book, which is objective but onerous as far as the Free French are concerned, will probably never make the best seller lists in France, because it does cast a shadow on certain of these forces.

After France surrendered to the Germans in June 1940 and after a quasi-fascist government was established at Vichy, the question arose as to which of the several French governments that soon came into being in various parts of the world would claim the allegiance of France's many overseas territories.

Syria was one such territory. Occupied by the French Army of the Levant — a heterogeneous force composed of Frenchmen, Foreign Legionnaires, Senegalese, Moroccans, Algerians, Tunisians, Syrian tribesmen, and Lebanese levies — it was commanded by General de Verdilhac.

In May 1941, the Germans began sending armed support through Syria for the Iraqis to use against the British. German pilots based in Syria also attacked British troops in Iraq and the Trans-Jordan. The British, with their eyes on Syria and Lebanon,

decided that the time had come to invade Syria and, scraping together a force of Australians, British, Free French, and Arab troops, entered Syria on 8 June 1941. They felt, apparently, that the troops of the Army of the Levant would come over to the Free French. Unfortunately for the British force, the soldiers of the Army of the Levant were not only anti-German, they were also anti-British and, especially, anti-Free French.

The Army of the Levant vigorously opposed the British invasion for 34 days and almost won out in the end. Eventually, though, it succumbed to the larger force.

The author describes the campaign with all the zest and emotion of a bayonet charge. His robust style is ideally suited to explaining the extraordinary circumstances and the characters that figured so prominently in the campaign. The book is scholarly, objective, and highly entertaining, and it places the 1941 campaign in Syria in its true historical perspective.

**ILLUSTRIERTE GESCHICHTE
DES I. WELTKRIEGS, by Christian
Zentner (Sudwest Verlag, Munich,
1980. DM 48). Reviewed by Brigadier
General Wolfgang Gerhardt, West
German Army.**

Because of more recent events, publications on World War I have appeared rather sparingly in the past few years. It is laudable, therefore,



that this illustrated history of World War I has just entered the book stores.

From the beginning, Germany, because of its geographic position in the

center and threatened on two fronts, had to take the initiative. The Schlieffen Plan was the initial operation that sought a strategic decision in the west so that Germany could have a free hand against Russia in the east.

The optimistic hope that the soldiers would be "home for Christmas" did not materialize; victory was not in sight anywhere. The war became harder and harder. When Moltke's strategy of destruction failed, the strategy of fatigue by Falkenhayn followed. In the drumfire and relentless attacks, the enemy would be bled white.

The book gives credit to all of the nations and men involved. The text is enlivened by numerous pictures and well done maps. A neat bibliography, a timetable, and an index complete this fine work of military history.

World War I was the first great war in which our fathers and grandfathers took part, not to forget the women who also served the war effort on both sides. It is hoped that the author will find an English-language publishing house that will distribute this book well beyond the German borders.

**FACING REALITY: FROM
WORLD FEDERALISM TO THE
CIA, by Cord Meyer (Harper and
Row, 1980. 433 Pages. \$15.95).
Reviewed by Doctor Joe P. Dunn,
Converse College.**

Partly in response to the outpouring of exposés and diatribes against the Central Intelligence Agency in the early and mid 1970s, several high ranking CIA leaders, including William Colby, Richard Helms, Vernon Walters, and Lyman Kirkpatrick have offered their memoirs in defense of the intelligence profession. This one by Cord Meyer may be the most interesting account. Meyer served in several high positions from 1951 until he retired in 1977 and is the Agency's only three time winner of its highest award, the Distinguished Intelligence Medal.

Meyer traces his life from his World War II days through postwar

leadership in the United States Federalist movement and the American Veterans Committee and on through his CIA career. Among his revelations are the story of Radio Free Europe and Radio Liberty, his battle against false "disloyalty" charges during the McCarthy era, the CIA's perspective on the Chile and Angola affairs, the Watergate morass that nearly engulfed the Agency, the Congressional investigations of the mid-1970s, and an introduction to KGB activities in the United States. Throughout, Meyer offers frank commentary about individuals and activities.

This is one of the more captivating books I have read lately, and I highly recommend it for both intelligence buffs and laymen.

THE GREAT WAR, by Correlli Barnett (Putnam's, 1980. 192 Pages. \$19.95).

In 1964, Correlli Barnett, a British military historian, acted as a consultant to and co-author of a British television series called "The Great War." This book, with its fast-moving narrative and hundreds of illustrations, is undoubtedly a by-product of that series.

Barnett devotes most of his narrative to the British and German armies on the Western Front. The United States Army's efforts are barely mentioned, and then only disparagingly. The French Army is featured in one short chapter — the battle at Verdun.

Barnett does provide a good overview of the war, its principal leaders, and its major events. More important, perhaps, are the illustrations, which are truly outstanding. Alone, they are worth the price of the book.

AN INFANTRYMAN'S JOURNAL, 1942-1966, by John F. Hummer (Ranger Associates, 1981. 185 Pages. \$12.95). Reviewed by Captain Harold E. Raugh, Jr., Fort Benning, Georgia.

This is the candid, personal nar-



rative of John F. Hummer and of his service in the United States Army from World War II through Vietnam.

He served with the Rangers during World War II and was discharged from the Army when the war ended. Disenchanted with civilian life, he re-enlisted in 1946 and was sent to Korea in 1949. He was transferred to Tokyo in that same year. After war broke out in 1950, he trained troops on Okinawa before returning to Korea and to combat, where he earned a battlefield commission and served as a platoon leader. He was temporarily retired for disability reasons in 1960 but was recalled to active duty in 1963. He was in Vietnam in 1965 and 1966 as commander of a military history detachment. He retired in 1966.

Hummer kept a meticulous journal

throughout his military career, and he does a superb job of describing the sights and experiences of combat and world travel, as well as the evolution of the Army from the sands of North Africa to the jungles of Vietnam. His down-to-earth narrative, supplemented by some excellent photographs, is recommended to infantrymen everywhere.

MAN O' WAR: THE FIGHTING SHIP IN HISTORY, by Richard Hough (Scribner's, 1979. 239 Pages. \$14.95). Reviewed by Rear Admiral George L. Phillips, United States Navy, Retired.

The distinguished British naval historian, Richard Hough, here com-

memorates fifteen of the world's most noteworthy fighting ships that in their time gloriously fulfilled their missions and left their mark on naval tradition.

This illustrious roster, from Britain's ARK ROYAL of 1587 to the USS NEW JERSEY of the present age, brings to life the feel of battle and the smell of gunpowder in a way that is typical of Hough's style and talent.

We follow Howard and Drake as they harry the mighty Spanish Armada up the Channel, Jones in the rotten hulk BONNE HOMME RICHARD, Nelson in the VICTORY, Porter in the ESSEX, Worden in the MONITOR, Togo at Tsushima, Beatty and Forbes at Jutland, Mountbatten in the KELLY, as well as the JAVA, the SARATOGA, the BISMARCK, and the NEW JERSEY of living memory.

This is a splendid roundup of those gallant men-of-war that made the first team in the game, who fully deserve their honored places in naval history. May their glory never fade. And while we miss Farragut at Mobile Bay, Dewey at Manila, Schley and Sampson at Santiago, and Harwood versus the GRAF SPEE at Montevideo, we can be confident that they would have approved this worthy book.

THE ENTIRE PEOPLE'S WAR FOR THE HOMELAND'S DEFENCE WITH THE ROMANIANS, by Major General Doctor Ilie Ceausescu (Bucharest: Military Publishing House, 1980. 375 Pages). Reviewed by Alexander S. Birkos, Mount Shasta, California.

The author's purpose is to provide English readers with a general survey of the growth and development of the concept of a nation at arms through two millenia of Romanian history. About half of the book deals with contemporary Romanian military affairs and its link with Communist Party policies, and with the development of the theory of "the entire people's war" (nation at arms) as an

organic element of Romanian military doctrine.

General Ceausescu stresses the importance and relevance of this doctrine for the strategic defense of Romania. Although readers may be frustrated by the poor English syntax, the book does offer a good starting point for anyone who wishes to pursue a detailed study of Romanian military affairs. Not surprising is the almost total absence of references to the Soviet Army.

Currently, the Romanians appear to be placing some emphasis on civil defense organizations, paramilitary training for youth, and the formation of so-called "patriotic guards" to support the defense missions of the Army.

While intended only as a general survey to promote discussion and further research, this book is a useful addition to the literature on East European military history.

RECENT AND RECOMMENDED

SOUTH PACIFIC HANDBOOK. By David Stanley. Edited by Bill Dalton. Tuttle, 1982. 544 Pages. \$11.95.

FEDERAL RECORDS OF WORLD WAR II. Two Volumes. Compiled and originally published by the United States National Archives, 1950. Republished by Gale Research Company, 1982. \$75.00 for the set.

THE MILITARY BALANCE, 1981-1982. 22d Edition. By the International Institute for Strategic Studies. Facts on File, 1982. 133 Pages. \$17.95.

DEFENSE MANPOWER PLANNING: ISSUES FOR THE 1980s. Edited by W.J. Taylor, Jr., E.T. Olson, and R.A. Schrader. Pergamon Press, 1982. 278 Pages. \$10.95, Softbound.

A BRIEF HISTORY OF THE 7th MARINES. By James S. Santelli. History and Museum Division, USMC, 1980. 83 Pages.

PRE-INVASION BOMBING STRATEGY: GENERAL EISENHOWER'S DECISION OF 25 MARCH 1944. By W.W. Rostow. University of Texas Press, 1981. 166 Pages.

WITH THE OLD BREED AT PELELIU AND OKINAWA. By E.B. Sledge. Presidio Press, 1981. 326 Pages. \$15.95.

STRATEGIC MINERALS: A RESOURCE GUIDE. Published by the Council on Economics and National Security. A project of the National Strategy Information Center, 1981. 105 Pages. \$5.95, Softbound.

HANDBOOK OF THE NATIONS. 2d Edition. Originally compiled and published by the United States Central Intelligence Agency as The World Factbook — 1981. Republished by Gale Research Company, 1981. 225 Pages. \$32.00.

MILITARY AIRCRAFT OF THE WORLD, 1981 EDITION. By Gordon Swanborough, Scribner's, 1982. 224 Pages. \$16.95.

RIOT CONTROL: MATERIEL AND TECHNIQUES. 2d Edition. By Rex Applegate. Paladin Press, 1981. 332 Pages.

WORLD WAR II PHOTO INTELLIGENCE. By Roy M. Stanley II. Scribner's, 1981. 374 Pages. \$39.50.

DWIGHT D. EISENHOWER: SOLDIER AND STATESMAN. By B. Alton Lee. Nelson-Hall, 1982. 379 Pages. \$21.95.

WATERLOO: THE HUNDRED DAYS. By David Chandler. Macmillan, 1980. 224 Pages. \$18.95.

SUEZ: THE DOUBLE WAR. By Geoffrey Powell and Roy Fullick. Hamish Hamilton, 1979. 227 Pages. \$22.50.

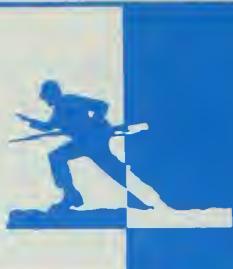
WITH THE GERMAN GUNS: FOUR YEARS ON THE WESTERN FRONT, 1914-1918. By Herbert Sulzbach. The Shoe String Press, 1981. 256 Pages. \$19.50.

ARMIES IN THE SAND: THE STRUGGLE FOR MECCA AND MEDINA. By John Sabini. Thames and Hudson, 1981. 223 Pages. \$16.95.

B-26 MARAUDER AT WAR. By Roger A. Freeman. Scribner's, 1979. 192 Pages. \$14.95.

AVENGER AT WAR. By Barrett Tillman. Scribner's, 1980. 192 Pages. \$17.50.

INFANTRY LETTERS



DESERT TOW FIRING

Dear Sir,

Recent operations at the National Training Center at Fort Irwin, California, indicate that TOW missile gunners who have been trained in temperate climates have problems when they are introduced to the extremes of the desert. The vast expanses of flat terrain and the mirage effect caused by intense heat rising from the desert floor combine to pose a difficult target acquisition problem. If a few simple desert gunnery techniques are used, however, the TOW can be employed in the desert as effectively as in other climatic conditions.

To reduce the mirage effect and eliminate any glare caused by direct sunlight, it is important for the TOW to be on higher terrain firing downward at a target. This gives the target a solid background and allows the gunner to get a true sight picture. It is not enough for the TOW to be just off the ground, mounted on a vehicle.

The TOW range card is critical in the desert, but because of the vast distances with few identifiable terrain features, a simple range card cannot be constructed just by using a map. Once it selects its primary and alternate firing positions, the crew must sight the weapon and walk the directions of fire, just as the machinegun crews walk their final protective fire lines. Known range marks must be made at 1,500 meters and at 500-meter intervals past 3,000 meters. This will keep the gunners from firing at a target that they can see at up to 8,000 meters but cannot hit at more than 3,000 meters. This will also help ensure a first round hit and will not compromise a firing position or waste a missile.

These techniques will improve the weapon's accuracy and the crew's ability to acquire a target. The techniques are also applicable to other

optically-sighted ground weapons such as the Dragon and a tank's main gun.

WALTER E. WRIGHT
CPT, Infantry
Fort Irwin, California

BATTALION OFFICER SCHOOL

Dear Sir,

I read with great interest Captain Walter A. Schrepel's article, "Battalion Officer School," in the January-February 1982 issue of INFANTRY (page 34). His idea has great potential and if such a school is planned, monitored, and executed well by the battalion commander, the executive officer, or the S-3, the units would earn high dividends in terms of junior leader or officer development and job satisfaction.

But a key element in junior officer development, which Captain Schrepel barely touches on in the last paragraph of his article, is timely, frequent, and meaningful counselling. Many company and battalion commanders — raters and senior raters — seem to overlook this responsibility with a resultant decrease in junior officer development, job satisfaction, and trust in and respect for their superiors.

Today's Army encourages regular counselling and feedback, and we insist that soldiers be counselled by their team or squad leader, and the squad leader by his platoon leader. But who counsels the platoon leader? Unfortunately, the meaningful counselling of junior officers seems to be the exception rather than the rule.

If more company and battalion commanders took the time and saw it as their duty (which it really is) to counsel their junior officers and assist them in their professional development, they would have more cohesive

and effective units, in addition to more proficient and confident junior officers.

In a unit where junior officers are counselled regularly, and in which a battalion officer school is instituted, there is no doubt in my mind that the result will be a highly-proficient, productive, motivated unit in which all officers willingly work together and altruistically lead their soldiers in accomplishing any mission or goal.

HAROLD E. RAUGH, JR.
CPT, Infantry
Fort Benning, Georgia

SERIOUS DOUBTS

Dear Sir,

I would like to make several comments about Lieutenant Mitchell E. Toryanski's article entitled "The Five-Degree Method" (January-February 1982, page 32).

First, I appreciate the fact that until the Army fields a laser range finder a soldier needs a way to determine distances on the battlefield. But I have serious doubts about the advisability of having someone casually strolling around the battlefield to determine how far away the enemy is from his position.

Even if the hand-held laser range finder is not forthcoming soon, we still have many ways to determine distances on the battlefield. Among these are the range finders on the M60 and M1 tanks and the methods of intersection and polar coordinates, which are basic map reading skills.

The most effective way to make sure our soldiers can estimate distances is through training. If we, the officers and noncommissioned officers, make our soldiers practice estimating distances during training, they will become quite good at it.

Let's not get into the business of cre-

ating unnecessary casualties by teaching methods that provide more exposure time than is required to perform the mission.

JOHN M. DIXON
MAJ, Field Artillery
Fort Knox, Kentucky

MORE MILITARY HISTORY

Dear Sir,

In an officer's basic and continuing education, he is subjected to a constant flow of information, ranging from things that are nice for him to know to things that are necessary for his professional growth. Unfortunately, though, a void remains where military history should be.

As a member of at least the second oldest profession, the officer has available to him more than 3,000 years of recorded accounts of warfare, and he must draw upon this vast body of knowledge to be proficient in his profession — to sharpen his mind and his sword.

While few of us may feel, as General George Patton did, that we have fought our battles in an earlier time, this feeling of *deja vu* on the

battlefield is one that undoubtedly is strengthened by a heavy diet of military reading. The fact that the Romans were defeated at Cannae in 216 B.C. takes on added interest and significance when we realize that the tactics the victorious Hannibal used are still valid.

Only through a self-imposed regimen of professional reading and through the addition of important texts to his personal library, can he who would wage war learn about it.

Although the principles of war may appear dry at first, they take on shape and flesh as additional readings elaborate upon and bear witness to their continuing validity in warfare. Certain specific texts (and the list here is by no means exhaustive) should find their way into the officer's mind and onto his bookshelf.

The West Point Atlas of American Wars is a must for the basic library. Its maps and explanations add to the web of learning, and for the small unit leader the works of S.L.A. Marshall are a must. They provide a vivid insight into the workings of *Men Against Fire*. A new book, *The Face of Battle*, written by an author who admits to never having seen that face, does a superb job of painting the face

of war in three different battles.

For each of the many military specialties, there are basic texts that should be read and re-read: For the Intelligence officer, *The Code-breakers*; for the Armor officer, *Brazen Chariots*; for the Infantry officer, *Company Commander*; and for the PsyOps officer, *War On the Mind*. For all, there is a most interesting and provocative work entitled *On the Psychology of Military Incompetence*.

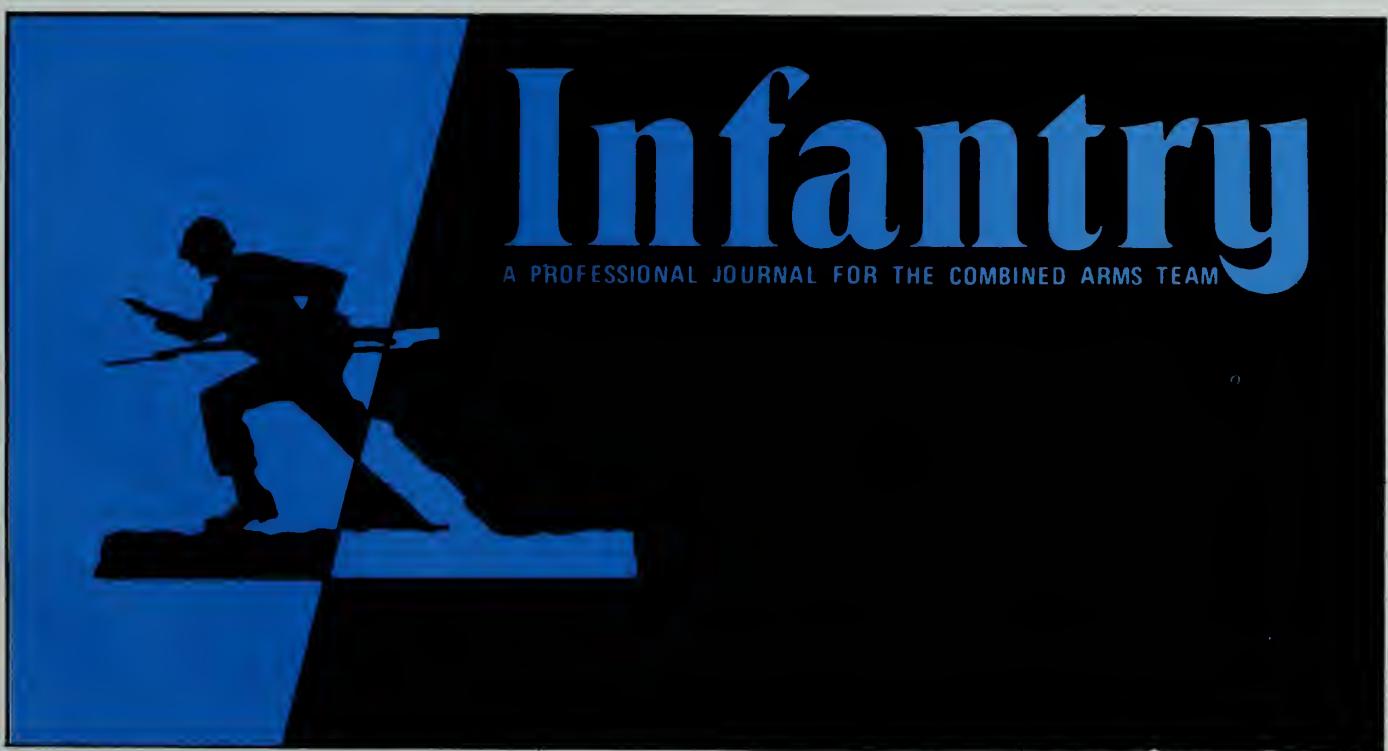
I would argue that the study of military history is as well served by novels as by biography. Some of the best coverage of the Vietnam war is to be found in fiction. *The Lionheads*, *Fields of Fire*, *A Rumor of War*, *The Grunts*, and *Sand in the Wind* all effectively add to the learning experience.

Ranging farther afield, *On the Banks of the Suez* provides a masterful insight into the Israeli war machine and presents a superb picture of internal politics of the conflict and their effect upon a war that appeared for a time to be a near thing for the Israeli Defense Force.

The price that we as officers pay for not becoming deeply involved in learning about our profession is too

Infantry

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awesome to contemplate. The officer corps, as the orchestrators of war, cannot afford again to spin our wheels *On the Treadmill to Pearl Harbor* or to reach for *A Bridge Too Far*. History provides little space for losers.

J.F. HOLDEN-RHODES
MAJ, USAF
Placitas, New Mexico

MILITARY HISTORY SYMPOSIUM

Dear Sir,

The Department of History at the U.S. Air Force Academy will host its Tenth Military History Symposium 20-22 October 1982.

The theme of this symposium will be "The Home Front and War in the Twentieth Century." Session topics will include the task of forging national unity and mobilizing public opinion in total war; the mobilization of men, money, and materiel for total war; the social effects of war on civil liberties, civil rights, and the role of women; and the interplay between limited war and domestic politics.

For further information please write or call me at the Department of History, U.S. Air Force Academy, Colorado 80840; AUTOVON 259-3230, or commercial 303/572-3230.

JAMES R.W. TITUS
MAJ, USAF
Executive Director

VEHICLE MARKINGS

Dear Sir,

Two items in your September-October 1981 issue especially caught my attention.

First, Lieutenant Noyes B. Livingston's "Vehicle Markings" was most enlightening to an artilleryman. The information that a three-digit number on a Soviet armored fighting vehicle (AFV) can be used to single out commanders is valuable for the best use of terminally guided munitions such as the Copperhead and the Hellfire. Vehicles in column or line formations whose numbers are visible to a forward observer can alert him to the best targets to attack with his resources. It would also be of great

value to any AT crew in selecting the best targets in a group of AFVs. The destruction of the unit leadership at platoon and company levels puts an increased burden on the higher echelons to command and control individual sub-units.

Lieutenant Livingston's suggested vehicle marking system would be a great command and control measure for mechanized units to use, and it would reduce unnecessary radio traffic in moments of combat.

Another interesting item in that issue is the letter by William Befort in which he advocates firing LAW rounds from the M202 "Flash" quadruple 66mm incendiary rocket launcher. I mentioned the same concept for battery antiarmor defense in an article in the *Field Artillery Journal* ("Defending the Battery," May-June 1979). Needless to say, no one has acted upon that suggestion, but I hope someone will act upon Mr. Befort's idea; then maybe we can get such weapons issued to field artillery batteries also.

LARRY A. ALTERSITZ
CPT, Field Artillery
Pittsburgh, Pennsylvania

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From The Editor

INFANTRY ASSOCIATION

Plans are under way at the Infantry School to revitalize the United States Infantry Association, which has been dormant for almost 30 years. The new Association's primary objective will be a simple one: to recognize professional Infantrymen and other interested people who share the camaraderie of our branch and our profession of arms.

The initial planning calls for all present INFANTRY Magazine subscribers to be charter members. Further details will follow in future issues of the magazine.

DEPARTURE

With this issue I leave the editor's desk and the fine staff that has supported me during the past year. I move on fully confident that my successor will continue the fine traditions that have been established over the years by the other professional Infantrymen who have been fortunate enough to have their names in the masthead.

DRK

BATTLEFIELD

*Above me shines a Judas moon
Its malevolent rays
Poking through the fleshless arms of a
burnt-out tree
A soldier hates the swollen moon.
He hates the open ground.
Night is kind. It hides and swallows us.
But this reveals, is a spotlight in the
wings
Waiting to point, to shout: There!
It picks out bushes, trees, shrubs —
Us.
As we lie in the black, burnt grass
Tightly watching the approaching murmur
of men,
Willing our stillness to hide us.*

*No innocent walks here. Innocence died
In a place like this.
Instead, shadowed figures glide,
Clash in a burst of noise
Litter the ground
With their human debris
And leave.*

*Yet the moon still shines
On a field of battle.
A starkly desolate
Beautiful
Place.*

(By Charles Lotter)

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Infantry

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A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

July-August 1982

Volume 72, Number 4

ARTICLES

- 16 **INFANTRY: A PREVAILING THEME**
Lieutenant Peter W. Harris, U.S. Navy
- 21 **THE MECHANIZED INFANTRY BATTALION TASK FORCE IN THE AIRLAND BATTLE**
Lieutenant Colonel Jimmy Griffis
Major Kurt Pierce
Major Ed Sherwood
- 25 **ATTACK OF A DESERT STRONGPOINT**
Captain Wayne J. Sabo
Captain Edwin L. Kennedy, Jr.
- 30 **CROSSING THE RHINE**
William Colon

FORUM AND FEATURES

- 6 **KEEP IT LIGHT**
Major John P. Gritz
- 7 **SELFLESS LEADERSHIP**
Lieutenant Colonel R. L. Sloane
- 8 **THE BALANCE**
Dandridge M. Malone
- 10 **COHESION**
Lieutenant Colonel Clark C. Brown
- 12 **ENGINEERS AND INFANTRY**
Colonel Gerald C. Brown
- 15 **GUARD YOUR TIME**
Major Gary D. Maynard

TRAINING NOTES

- 34 **THE COUNTERATTACK**
Captain Charles S. Haffenden
- 36 **SPOT REPORTS**
Captain Raymond W. Levesque
- 37 **CAMMS**
Lieutenant Colonel William L. Howard

DEPARTMENTS

- 2 **COMMANDANT'S NOTE**
3 **INFANTRY NEWS**
39 **ENLISTED CAREER NOTES**
41 **OFFICERS CAREER NOTES**
45 **BOOK REVIEWS**
49 **LETTERS**

FRONT COVER

The development of the Bradley Infantry Fighting Vehicle (BIFV) and its introduction into the Army in early 1983 will form the centerpiece of the Infantry's contribution to the AirLand battle.

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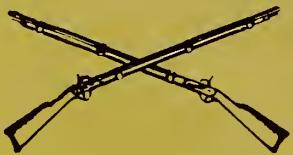
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

INFANTRY ASSOCIATION

We are delighted to announce the reestablishment of the Infantry Association here at Fort Benning. Our purpose in revitalizing this organization is threefold:

First, to acknowledge and recognize the camaraderie of the Infantry branch and our profession of arms.

Second, to provide accurate and current information concerning professional developments, tactics, and doctrine to Infantrymen around the world through meaningful dialogue.

Finally, to establish a communications net that draws upon the expertise of Active duty, U.S. Army Reserve, National Guard, and retired personnel who share a mutual interest in maintaining the highest caliber of Infantrymen for the U.S. Army.

Initially, charter members of the Infantry Association will be those who are presently paid subscribers to INFANTRY magazine. No other fees or dues are required for membership other than the normal subscription price

of the magazine.

Present subscribers are well aware of the benefits they now receive from INFANTRY. An annual index of articles by author, title, and subject is available free of charge and is invaluable in doing research for articles and staff papers. Book reviews of historical as well as contemporary works are the ideal way for a professional to keep his own personal library current. Finally, the magazine offers a forum for the exchange of ideas on doctrine, tactics, training, and many other topics for the Infantryman.

It is our firm purpose to hold the Infantry banner high and to reinforce the vital role it has always played within our Army. Plan to join our ranks as a member of the Infantry Association. Our branch is the keystone of the combined arms team.

Practice Combined Arms.

INFANTRY NEWS



THE FIELDING OF THE new Bradley Fighting Vehicle will begin with the issue of vehicles to the 2d Armored Division at Ford Hood early next year. The units that receive the Bradley will then undergo New Equipment Training (NET) that will be conducted by NET teams now being organized and trained at Forts Benning and Knox.

The NET teams have a two-fold mission: to provide individual training through Skill Level 4 for all MOSs that require transition training, and to provide collective training for crews, squads, and platoons. The battalions that will receive this NET training will be organized under the "J" series or Division 86 TOE before the training begins.

The NET teams will train all operator (MOS 11B and 19D) and maintenance (MOS 63T and 45T) personnel. The maintenance personnel will be trained before the operators so that the units can have a portion of their maintenance personnel trained and available to conduct maintenance on the vehicles during the period when the operators are being trained.

The training cycle for maintenance supervision will be 8 weeks, while the organizational mechanics course will run for 3 weeks. The operator training period will consist of an 8-week training cycle for the mechanized infantry companies and a 6-week cycle for the scout platoons and cavalry troops. The training time needed for each mechanized battalion will be about 11 weeks.

A NET team for operator training has five elements: one is assigned to each rifle company and one is responsible for training the scout platoon and the headquarters personnel. The NET team will use a squad trainer concept in which a NET trainer is assigned to each vehicle at the start of

the training cycle and will remain with that squad or crew throughout.

All NET training for battalions in the United States will be conducted on-site at the various U.S. installations. When the NET training for a unit has been completed, all 11B personnel who have successfully completed the training will be reclassified 11M, BIFV Infantryman.

After all units of the 2d Armored Division have been trained, the NET teams will move to another CONUS installation.

THE ARMY RECENTLY ANNOUNCED the award of a contract that will seek full-scale engineering development adapting the TOW-2 to the Bradley Fighting Vehicle System.

TOW-2 is a major improvement over the Army's basic TOW; it will be able to counter more sophisticated enemy armor with its new six-inch warhead, new flight motor, and improved guidance system.

The Army's Missile Command (MICOM) also has the Improved TOW program under way. The I-TOW features a redesigned five-inch warhead that will penetrate heavier armor than the basic TOW will.

Both programs use the existing TOW equipment to the fullest extent possible.

THE INFANTRY SCHOOL is making final preparations to field test its newly developed version of the Military Qualification Standards II (MQS II) manual for infantry lieutenants.

The MQS concept developed from the Army's need to tell each of its officers what he needs to know to reach the expected performance levels, and

it is intended to provide a means by which each officer can meet those prescribed standards. Because the standards will change as an officer gains experience, the MQS program has been divided into three distinct phases: MQS I addresses the precommissioning years; MQS II addresses an officer's first three years of Army service, normally the years he will spend as a lieutenant; and MQS III addresses the fourth through tenth years of service, generally the years he will serve as a captain.

The Infantry School conducted a major analysis and identified the tasks that are considered most important to successful job performance. Using this information, the School developed MQS manuals for training at Levels I and II. It also developed detailed teaching packages called Training Support Packages (TSPs). The TSPs are designed to help standardize training at the school level and to provide all the items that are needed to teach a particular topic — lesson plans, training aids, lesson narratives, graphic aids, slides, and suggestions for practical exercises. The support packages and supporting manuals for Level I are now being field tested in all of the Army's pre-commissioning programs.

Another aspect of the MQS program is the MQS professional education component. The proposed MQS education requirement specifies that all officers will have a college degree by their tenth year of service with courses in each of five areas: human behavior, written communication, military history, national security policy, and management.

A third aspect of the MQS program is the professional reading program. The reading requirement will be standard for all lieutenants, regardless of specialty. It will consist of a directed

reading program of required books with a bibliography provided to encourage additional reading. The program will be organized into four subject lists: classical military literature, contemporary military literature, military ethics, and specialty or branch-oriented literature.

The professional education component will not be tested during the MQS pilot test period, and only an abbreviated version of the professional reading program will be tested.

It is planned for the MQS II manual to be fielded for testing by selected units beginning in the fall of 1982. The test period will last about one year and has been programmed to evaluate the overall effectiveness of the manual. During the test period, two methods of certifying completion of the tasks will be tested: command and self-certification.

Officers assigned to units selected to test the new MQS II program will carry an important responsibility because they will provide the test bed for what may result in dramatic changes in the Army's officer education system.

(Note prepared by Officer Design Branch, DTD, USAIS.)

THE NEW SQUAD AUTOMATIC WEAPON SYSTEM (SAW) has been type classified by the Army and is deemed ready for production. The 5.56mm SAW will be deployed primarily in infantry fire teams in the Army and in the United States Marine Corps.

The SAW system components include the M249 5.56mm machine gun, the M855 5.56mm ball cartridge, the M856 5.56mm tracer cartridge, and the M27 5.56mm metallic belt cartridge link.

The M249 uses well-tested principles of design, combined in a conventional configuration. The conventional piston-actuated gas system allows for a choice of two power settings, which are achieved by regulating the bleeding of the gas entering the cylinder. This feature provides for a constant cyclic rate of



fire of 750 rounds per minute even under adverse firing conditions.

This 15.6-pound weapon fires from the open bolt position, which reduces the likelihood of a cook-off of rounds. Its barrel can be changed within three seconds. The M249 can be both belt-fed from a 200-round container or fed from the 30-round magazine that is used in the M16A1 rifle.

The M855/856 cartridges used in the SAW meet the requirements of the NATO 5.56mm Second Caliber Standardization Agreement (STANAG 4172). The ball cartridge is similar in configuration to that of the M193, which is used in the M16A1 rifle, but it offers significant improvements in extended range effectiveness. Likewise, the tracer car-

tridge uses the same exterior cartridge configuration as the Army's current standard M196 tracer cartridge, but extends the visibility of the round during the day as much as 50 percent.

A blank firing attachment will be developed for training and for integration with MILES. Newly designed load-carrying pouches also have been extensively tested, and technical data packages will be developed to support their type classification and procurement. These pouches, which will fit on the standard load-carrying belt now in use, will let the gunner carry 600 rounds of ammunition. A weapon storage rack is also being developed so that the SAW weapons can be properly secured.

The current five-year procurement plan calls for the purchase of about

26,000 SAW weapons for the Army and another 9,000 for the Marine Corps. More SAWs will probably be acquired for non-infantry and joint services units.

THE ARMY'S PARACHUTE TEAM, the Golden Knights, will hold tryouts for the 1983 demonstration season at Fort Bragg during the period 27 September to 5 November 1982.

Volunteers who would like to try out for the team must be serving on active duty as corporals, sergeants, or staff sergeants; must have at least 150 free-fall jumps; must be actively jumping a ram-air type canopy; must have at least two years remaining on their current enlistments on 1 January 1983, or must be willing to extend or reenlist; if serving overseas, must have completed five-sixths of their tour by 31 December 1982; and must not currently be on overseas orders or alerted for overseas assignment.

Qualified personnel may request tryout applications by writing or calling the Commander, U.S. Army Parachute Team, ATTN: Tryout NCOIC, PO Box 126, Fort Bragg, North Carolina 28307, AUTOVON 236-4800/4828, or commercial 919/396-4800/4828.

Those who are selected to try out for the team will be notified through command channels and will be placed on either temporary or special duty for the tryout period. If considered for final selection, the applicants will remain at Fort Bragg until about 17 December for a more complete evaluation.

THE GOLDEN KNIGHTS are also asking for applications from officers who would be interested in being assigned as the team's operations officer. The assignment will be made in either October or November of this year.

Applicants should be captains or first lieutenants, be airborne qualified, have a Class D U.S. Parachute Association License, have experience

in air operations scheduling, be even-tempered, have the ability to work in harmony with a wide range of civilian and governmental agencies, and must be able to serve at least two years in the position if selected.

Applicants must present an outstanding personal appearance, must have a good personality, and must have the ability and desire to represent the Army to the general public.

Interested individuals are asked to submit their resumes as soon as possible, with a full length official photograph attached, to the Commander, U.S. Army Parachute Team, PO Box 126, Fort Bragg, North Carolina 28307.

EVERY THREE MONTHS for the past few years the Army Training Extension Course (TEC) has issued a complete list of all TEC lessons that have been fielded or will soon be fielded. The last issue of the Extension Training Material (ETM) TEC/SPAS Availability List, dated 3d Quarter FY 82, has been sent to all of the 7,300 TEC account holders.

The Availability List has been replaced by the ETM catalog, identified as the 350-series of DA Pamphlets, which have been distributed to the field. For additional information about the catalog, interested personnel can write to the Commander, U.S. Army Training Support Center, ATTN: ATIC-AET-IO, Fort Eustis, Virginia 23604, or can call AUTOVON 927-3522/2240, or commercial 804/878-3522/2240.

AN INFORMATIVE NEW SERIES of TEC lessons on "European Orientation" was fielded earlier this year. It was produced especially for soldiers and their families who are scheduled for a permanent assignment in Europe. They are recommended for Active Army personnel and for members of National Guard and Army Reserve units that have Roundout missions in Europe.

The TEC tapes are identified by

consecutive numbers from 920-791-0001-F through 920-791-0012-F. Their viewing times range from 15 to 45 minutes, and it takes almost eight hours to view all twelve.

THE COMPANION FIELD JACKET for the camouflage battle dress uniform (BDU) is expected to be in the Army's supply system in March 1983. The BDU field jacket is made of the same material as the Army's present field jacket but has some of the same characteristics as the BDU, including the infrared reflective dyes and the camouflage pattern.

The present plans call for issuing one of the present field jackets and one BDU field jacket to each new recruit beginning 1 March 1983. Beginning 1 October 1983, new soldiers will be issued two BDU field jackets.

Starting 1 March 1983, Army clothing sales stores will be able to order the BDU field jacket for sale to Active Army soldiers, and for sale and issue to members of the Reserve Components.

By 1 October 1983, all Active Army soldiers will be required to have one BDU field jacket, and must have two of the jackets by October 1985. Reserve Component soldiers must have one BDU field jacket by October 1985.

The BDU field jacket does not experience the same shrinkage problems that have been associated with the BDU. In fact, laundering care for the BDU jacket is the same as for the present field jacket, except that it should not be starched.



FORUM & FEATURES



KEEP IT LIGHT

MAJOR JOHN P. GRITZ

What good is an army that can't get to a war on time, has too much equipment that needs too much fuel when it does get there, and acts more like a target than an attacker on the battlefield?

Unfortunately, that's the kind of Army we are fielding today. It consists primarily of armor and mechanized infantry units. Its light infantry divisions either have lost one brigade each or have been scheduled for complete deactivation. Our one airborne division is the best we have in terms of strategic mobility, but our planners seem to have developed the other forces as if our Canadian and Mexican borders were threatened: These units might stop a lightning armor thrust into Colorado or Texas, but they would strain our sea and air bridges to Southwest Asia or Central Europe. In the end, they probably wouldn't get there in time to win a war, much less deter one.

It's time we de-emphasized exotic and expensive tanks* and infantry fighting vehicles and concentrated instead on fielding a leaner army, one composed of more deployable, flexible, efficient, and survivable light infantry units.

In quick-response situations, light infantry — even the fairly heavy units we have now — can effectively use air and all other forms of transportation as well, including trains, buses, boats, mules, and foot power, to get its troops into battle without delay. Our armor and mechanized infantry forces, on the other hand, must rely on pre-positioned stocks for their European combat power, or else be prepared for a long delay in getting their soldiers and vehicles together at ports and airheads — provided, of course, that the vehicles ever get there at all.

Light infantry can be employed in practically any environment. Bad weather and darkness are aids to the footsoldier. When his air assault contemporaries are grounded by darkness, and his mechanized friends are mired in snow or mud, he can still fight — on the plains and woods of Europe, on the deserts of the Middle East, or in jungles, cities, and mountains.

Light infantry units are less dependent on equipment and fuel than other types of units. Relying only on shoe leather to carry them, they are less hindered by the surprises of war.

Mechanized units require too many soldiers and too much equipment just to support their vehicles. Ask a mechanized infantryman where he spends most of his time, and he'll probably reply, "At the motor pool." And the same fuel problems that keep him locked in a garrison motor pool in peacetime will stop him and eventually put him on foot when he goes to war.

Light infantry has the added advantages of being more flexible and adaptable, and better able to augment its resources by living off the land and the enemy's spoils. Most important, well-trained and well-employed light infantry units can survive on the battlefield better than mechanized divisions can with all of their armored vehicles.

Shoulder-fired antitank and air defense weapons have completely changed the infantryman's combat power in relation to armor and air power. Since the Arab-Israeli War of 1973, for example, the volley fires of massed infantry antitank weapons have considerably reduced the advantages previously held by armor columns.

In terms of being seen, identified as

a threat, and engaged on the battlefield, light infantry units have a definite advantage over armor and mechanized forces. They can dig in. They can hide. They can move quietly at night. In many ways, they are more mobile on foot at three miles per hour than their mechanized counterparts are in their vehicles. Foot troops make better use of the terrain, leave a smaller electronic or visual signature, are not bound to lines of communication, and are the most capable at effecting surprise.

Ironically, light infantry can be organized, equipped, and trained for a fraction of the price of mechanized forces. Discounting the cost of the soldiers' pay, food, and ammunition, the purchase price of one new Bradley fighting vehicle — about 1.5 million dollars — could provide six or seven light infantry battalions with enough money to cover their operations and maintenance for a year.

It's time, therefore, for us to shift our budget priorities and doctrine to a more formidable infantry force

structure that is prepared to get to war fast and fight on our own terms.



MAJOR JOHN P. GRITZ
holds a master's degree from Central Michigan University and recently completed the Marine Corps' Command and Staff College. He is now assigned to the Special Operations Task Force, Europe.

Selfless Leadership

LIEUTENANT COLONEL R. L. SLOANE

When I started my military career a number of years ago, one of the first things I learned was that the most important aspect of military service had as its core the old adage that the mission and the men come first. I believed it then; I believe it even more now.

Unfortunately, too many of the Army's leaders today seem to have forgotten that, although the mission must come first, it is only slightly more important than the men. These leaders seem to be willing to sacrifice their men needlessly for the mission, especially when the accomplishment of the mission is linked in their minds with their own personal advancement.

Modern technology and the various management theories that have been applied to the Army have helped engender this idea that the men are expendable. The equipment and systems that have been developed

tend to promote the dehumanization of soldiers — the men have become mere commodities, a part of the equipment or the system. And because most of the management theories focus on the need for the people to support the organization in attaining a certain goal, they fail to recognize the corresponding obligations the organization has to its people.

The Army's leaders too often become so enmeshed in the details, in the micro-management of their own actions, that they lose sight of their overriding goal. Slowly, then, over a period of time, it becomes easy for them to compromise their inherent personal values for those of "the system." Their programs and budgets then become more important than their people, and accomplishment begins to outweigh human concerns. This is what convinces many outsiders that the Army's leaders do not really care for their soldiers, that they

lack the necessary moral courage to stand up for their men, and that they have mortgaged their integrity by deluding themselves as to their real goals.

It is quite evident then that one of the Army's major internal problems is the increasing selfishness of its leaders. But this is only a symptom; what we need to do is look at some of the underlying causes.

First, leaders need to be able to assess where they stand and what they can expect their future to be, but the individual leader finds it difficult to get the information he needs to make this assessment. Some of the recent changes the Army has made in performance assessment and career progression may prove beneficial in the long run, but they are not enough in themselves to bring about changes in the basic motivations of its leaders.

The Army also needs a far less narrow and less subjective system of

assessing performance and potential, and it must couple such a system with a revised career program. For example, individuals who reach high levels of competence before their retirement dates should be retained by the Army and used in positions where their experience and training can be put to good use. Perhaps they could be given special pay incentives to keep them productive and useful members of the military establishment.

Another cause of the rise in personal selfishness is the perception of many leaders that their standard of living is being lowered and that their benefits are being steadily eroded. Many of them also feel that the Army is not devoting enough of its resources to training and maintenance despite a seemingly increasing enemy threat. As a result, they question whether the country and its political leaders truly want and are willing to support an Army that is large enough for today's troubled world. This, in turn, causes them to sense that their superiors are interested in things other than people and to doubt that it is worth while for them to struggle to maintain high levels of unit readiness at great per-

sonal effort. Eventually, they become more concerned with their own well-being and security than with service to their country and duty to their mission.

Another problem is that, even with the eroding of benefits, many people are entering the service today for purely economic reasons rather than out of a sense of service or duty. In fact, with such motivations implicit in its recruiting and retention programs, the Army cannot help attracting the self-interested and self-concerned, thereby insuring ever-increasing numbers of selfish leaders for the future.

General of the Army Omar N. Bradley once said, "A man is not a leader until his appointment has been ratified by his men." While the Army's primary purpose may well be to equip, train, and employ its units anywhere in the world, if its leaders do not show a sincere concern for their men and establish a strong bond with them, their leadership will never be ratified. This does not mean that the leaders must pamper their men or relax their standards of discipline. It does mean that they must place the interests of their men first. If they do

this, the men will then put their mission above all else, and the mission will be accomplished.

The Army must come to grips with the fact that many of its leaders have deviated from its inherent concern for its men and must help these leaders get back on the right track. Only by providing them with the means through which they can better see themselves and look toward a secure future, can the Army hope to motivate them to look outward, away from themselves and toward their men.

If the Army's leaders can find it within themselves to be truly concerned for their soldiers' lives and welfare, then nothing will be able to stop the Army from carrying out its mission to defend this great country.



**LIEUTENANT COLONEL
R.L. SLOANE**, a 1963 graduate of the U.S. Military Academy, has completed the Command and General Staff College and the Army War College. He is now a regimental tactical officer at the U.S. Military Academy.

The Balance

DANDRIDGE M. MALONE

In the whole process of developing leaders over a period of time, there will be one general malfunction. The leadership of the unit will continue to operate, even with this malfunction, but it won't run smoothly on all cylinders. This malfunction has to do with *balancing*.

Two big factors underlie all we know about Army leadership: the accomplishment of the mission, and the welfare of the men. Mission and men.

Leaders are always working with these two basic factors. Whenever and wherever possible, a leader tries to balance them so that both the

needs of the mission and the needs of the men are met. But there are times — sometimes in peace, often in war — where the needs of both cannot be met. The balance cannot be kept. A leader must choose one over the other. In these few situations, and the leader must make them few, the mis-

sion must come first.

There are those few times when our Army will not, cannot, and should not "be fair." The whole meaning of Army leadership rests on this law: the mission must come first. So does the meaning of "soldier," and "service," and "duty."

In the balancing business the mission side of the scale requires, to put it simply, knowing your job in excruciating detail. It requires technical competence. Without it, an Army leader can never lead for long. Just talk won't work. The troops will know.

The men side of the scale requires the leader to know his soldiers. He must know what's inside of them, what makes them do things or not do things, what turns them on or off, what they can do and what they will do under stress, and when they're afraid, or tired, or cold, or lonely. These are the things he needs to know about his soldiers. They're what tells him how a soldier measures up on the "able and willing" gauge.

You, as a leader, must try to balance between these two requirements — mission needs and men needs. And it is precisely here, in this "balancing" business, where leaders most frequently fail. It is here where young sergeants and young lieutenants have their greatest difficulties and where even old leaders, despite their wisdom, sometimes lose sight of the ultimate purpose of leadership. The problem arises because of the relationship that exists between the soldiers' happiness and satisfaction on the one hand and their productivity and mission accomplishment on the other.

Common sense might tell you that happy, satisfied soldiers will get the job done better. From this, a leader, especially if he's a new sergeant or new lieutenant, might well assume that if he can somehow keep his soldiers happy and satisfied, then they will be more productive, more likely to get the mission accomplished. But the strange chemistry of leadership just doesn't work this way. A thousand scientific studies of leadership, and a thousand lessons of



leadership experience, both prove that what seems to be a natural, common-sense assumption is precisely wrong!

In simple terms, mission accomplishment builds morale and esprit far more often than the other way around. When soldiers and units do the things that soldiers and units are supposed to do, that's when morale and esprit are highest. That's why the one best way to build will is to build skill. That's why those new basic training graduates are so fired up about soldiering and about the Army. That's why unit esprit is at its peak when the unit has a good exercise going out in the field.

If leaders don't know both sides of this leadership scale — the needs of the mission and the needs of the men — in full detail, they'll be forever getting the scale tilted the wrong way. And when that happens, the soldiers' time, or the soldiers' spirit, or the soldiers themselves will be wasted.

There are times, in training, when you may be led astray. You may see cold, wet, muddy troops coming in from a night field exercise at 0200 and say, "Hell, let's let 'em get a hot shower and some sleep; then we'll pull maintenance when it's light enough to see." And there are times just like that in war when a bloody

and shot-up company may be stalled in its assault, for the second time, halfway up a hill. You say, "Hell, they just can't do that again. Let's dig 'em in, pound that hill with Red-Leg, and ask battalion for reinforcements." If you love your troops, in the noble way that good leaders do, both these decisions, at the time, may seem to be just common sense. But both are taking the easy way out, and both violate the ultimate purpose of Army leadership.

Now you can, and should, argue this point. But if you're talking about leadership, there's no way you can win. The purpose of leadership is to accomplish a task. And in the final analysis, when the action shifts to the battlefield for which you are now preparing, mission must come first. As you lead, and as you build leaders, this law must be, flat-out, the cornerstone of your foundation.

DANDRIDGE M. MALONE, a retired Infantry Colonel, has published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools, including the Armed Forces Staff College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

COHESION

LIEUTENANT COLONEL CLARK C. BROWN

The importance of cohesiveness in a combat unit has been recognized for a long time. Nearly 2,400 years ago the Greek general Xenophon observed that the successful unit in a conflict is the one that "goes into battle stronger in soul." To have a soul a unit has to be more than just a loose collection of soldiers who are supposed to fight together if the need arises — it has to be close. It has to have what we now call cohesion.

If we analyze the term "unit cohesion," it appears to be redundant: "To cohere" means, literally, to cling together, and the word "unit" refers to individual parts that do cling together. Many of our infantry units during World War II demonstrated a great deal of cohesion and, therefore, were able to withstand extreme hardships and to accomplish almost impossible missions. But during the years since the end of World War II, the Army's units lost that special quality of closeness, and it now has become necessary to reintroduce the idea by talking about "cohesion."

But talking about cohesion is not enough. Somehow we must analyze what it is and then look at how we should go about achieving it.

Cohesion is difficult to define in a meaningful way, because it is made up of such intangible qualities as trust, confidence, and sacrifice, which are defined in terms of feelings, needs, and values. For these reasons it may be more helpful to describe a unit in which these intangible qualities are found.

In a cohesive unit a soldier shares a feeling of belonging to a group and accepts the unit's mission as his own. Each member takes pride in his job performance and sees his efforts as contributing to the unit effort as a whole. Each member is tightly bound with the others in feelings of reciprocal trust and kinship. Each soldier believes that his leaders really care about him. Each is proud of his membership in the unit, because he has earned it through difficult basic and unit training.

IN BATTLE

In battle this feeling of cohesiveness compels the soldier to fulfill his obligations to his comrades even at great risk to himself. No matter how long a battle lasts or how much destruction has occurred, the surviving soldiers will try to get the job done the best way they can and with whatever means they can find.

A soldier in such a unit will endure hardships and jeopardize his own safety for the welfare of his comrades, and he will do these things because he believes they would do the same for him. A Dragon gunner, for example, will sight his weapon for several seconds, exposed and under fire, because he is confident that his buddies will protect him.

Victory, then, is decided by soldiers who have the spirit and will — the soul — to go on despite the odds, and Army leaders must strive to develop

that degree of cohesion in their units. To do this, they must focus on major improvements in the three most important areas: mission training, standards of performance, and leadership.

Too often, though, soldiers have difficulty seeing the importance of their unit's mission and, consequently, of their own jobs in the unit, because they are not given the resources they need. "Doing more with less" has become a too-common phrase in the Army. Resource shortages bring about shortages in time, and time shortages cause poor planning and last-minute changes, which further deplete resources, and the cycle starts over again.

Combat realism in training is often subordinated to the practical realities of the current peacetime environment, such as the high costs of maneuver damage, shortages in gasoline, and the expense of high technology, ordnance, and supplies. But when a soldier turns to his leader for reassurance, he often finds a person who cannot offer an explanation for the way things are and one who probably even has some doubts of his own. But regardless of how logical and well-meaning the explanations may be for the unit's shortages, soldiers will evaluate their role and their unit's mission on the basis of their own perceptions and no one else's.

Even if a soldier can understand that training restrictions are unavoidable results of pressures from the out-

side, he may not be able to understand his leader's lack of emphasis on solving such problems as camouflage and dispersion and chemical warfare training. He may feel deceived and cheated and may begin to doubt that his leader really cares about him. The soldier knows that these unsolved problems could quickly get him killed in combat; he is not a gullible fool.

This problem is complex, but it can be solved. First, a new method of operating within the Army is needed, especially for dealing with unit readiness. The Army should focus more on the squad and the platoon, considering everything from recruiting to weapon system procurement. A small-unit leader also needs more support from his chain of command if he is expected to conduct training, and he must be made to feel free to use his imagination in carrying out small-unit operations and adventure training.

Once its focus has been reoriented, the Army can start applying methods for developing cohesion — personnel stability, increased operating and training funds, improved equipment, and tougher training. The recent idea of keeping companies together for a three-year period is a good beginning, because it will emphasize personnel stability at company level and below and also because this effort may provide us with some fresh ideas on how to improve the small-unit cohesion we already have.

Another method of achieving stability may be to list all battalion-sized units by priority and to assign scarce resources only to high-priority units that can be kept at a level of readiness that is high enough to allow soldiers to practice their skills. Units that cannot be assigned enough resources should be deactivated or kept at cadre strength until sufficient quantities become available.

In addition, a better balance should be achieved between expenditures for operational readiness and for new equipment procurement. The resulting improvement in training would go a long way toward promoting unit cohesion.

If a unit is to be cohesive, its soldiers must believe that high standards of personal performance are both necessary to accomplish the unit's mission and desirable for enhancing their unit's prestige. If they believe this, the soldiers will also believe that high standards of professional conduct are worthy of their personal sacrifices. Each person needs to feel pride in what he is and what he does, and this pride is further improved by his affiliation with a group that he considers a winning team.

Before a soldier can be proud of belonging to a unit, though, he must first feel that he has successfully negotiated a tough selection process that has done away with those who could not meet the prescribed standards. To build this individual and unit pride, the Army must start with a demanding period of basic training and then carry the same demanding standard into the rest of its operations. Basic, advanced, and unit training should become progressively tougher and more demanding on the soldier, requiring him to develop and maintain the strong personal discipline that he needs to foster pride.

Everything the soldier receives should be earned, and this should include branch insignia, medals, badges, promotions, and distinctive unit crests. As he works harder and earns more prestige, the tough regimen of unit training and testing should bring him even greater rewards: the intangible rewards of belonging, and the reciprocal affection and trust of the other members of what he perceives as the best unit in the Army. Without this pride in his unit, a soldier will not invest his efforts to set and achieve high standards of performance. Soldiers want to be a part of a winning team, and the Army can satisfy these ambitions by setting tough training and performance standards and by challenging its soldiers to meet them.

Tough unit training, then, continues to serve as a means of maintaining unit cohesion once it has been

attained. Since the goal of war can be described as causing the disintegration of an enemy's units, it is crucial that the Army train its units to resist disintegration. This will help build confidence and trust in the unit as a whole.

Once high performance standards and unit pride have been developed, one last item is required: a distinctive uniform. Proud soldiers want to be distinguishable as members of their units.

LEADERSHIP

Sound leadership is the cement that binds the other elements together to form a cohesive unit. In a cohesive unit the soldiers know that their leaders will see to their needs and share their risks. Seeing to their needs includes making sure they are well trained for their duties and are part of a unit of which they can be proud.

The crucial question of leadership is how to get good leaders and how to prepare them to lead the Army's small cohesive units. Today, there is little specific guidance available to our small-unit leaders that can help them develop unit cohesion. They are usually told to accomplish it but are seldom given the means with which to accomplish it. It is ironic that we expect the leaders with the least experience and the fewest resources to meet one of the Army's greatest leadership challenges.

To solve this problem, the Army must do two things: First, senior leaders must stop assuming that all young sergeants and lieutenants are leaders as soon as they are appointed and must do more to develop them into leaders. Second, professional development training and a leader's code of ethics should also be developed with small-unit leadership in mind. Some leadership is taught in Army schools, of course, but we must do much more. That training should teach more about group dynamics and principles of motivation, using historic examples found in such books as *The Face of Battle* and *Men*

in Arms. The objective of this leadership training should be to understand what makes people work together, what they expect of their leaders, and how leaders can create an environment that is conducive to building cohesion. We must also select the more promising leaders and make sure they are given leadership positions as early and as often as possible.

Professional development schooling should support the professional responsibilities of the leaders and not the perception that a large number of commissioned and noncommissioned officers need college degrees. A code of ethics that outlines what is expected of leaders should be adopted as a guide.

In the final analysis, I believe it is accurate to describe the leader that

most soldiers want as smart, flexible, caring, and brave. We should recruit and develop our leaders to match this description. Soldiers will put up with a lot of hardships if they believe that the tough "old sarge" and the smart "young commander" will take care of them and at the same time outwit and defeat an enemy.

A soldier will usually develop and emerge as a formidable warrior if he feels that he is well led, that he is valued as a respected member of a team, and that he has a vital job to do.

Military leaders must remember that their greatest weapon, even in this technological age, is the individual soldier. They must strive to develop and sharpen that soldier's skills. Leaders should work to

develop the American soldier's natural intellect and inventiveness, which have been labeled "Yankee ingenuity."

With good leaders and trained soldiers bound together in cohesive units, we can have renewed faith in our Army's competence to defeat all comers.



LIEUTENANT COLONEL CLARK C. BROWN is an instructor in the Department of Behavioral Sciences and Leadership at the U.S. Military Academy. He holds a master's degree from the University of Northern Colorado and has completed the Armed Forces Staff College.

Engineers and Infantry

COLONEL GERALD C. BROWN

In a recent issue of INFANTRY, Major John A. Bornmann, in "Ditch Diggers and Lead Slingers," concludes that engineers, to fight as infantry, must be heavily supplemented with combat systems and personnel. (See INFANTRY, November-December 1981, page 14.)

I disagree.

Certainly, when engineers must fight as infantry, the extra personnel and equipment that Bornmann recommends would help the effort. His list includes more Dragons, machineguns, TOWs, communication equipment, tanks or armored personnel carriers, artillery forward

observers, air liaison personnel, specialists in air defense, and scouts. But where is the maneuver commander supposed to get these resources to augment his engineers? Usually there are not enough of them for the units that are authorized to have them.

I believe that the engineer on the modern battlefield must be like the Minuteman of early American history. Whenever there was an Indian threat, or when the British were coming, the Minuteman would grab his musket from over the fireplace and join the fray. In short, in an emergency, the Minuteman respond-

ed as best he could with whatever he had available.

So it must be with combat engineers. Because they work on the battlefield where enemy contact is expected, they must be prepared to defend themselves at all times at their worksites, on the march, and in bivouacs. And they, too, must fight with the equipment and the supplies they have. In emergencies, when they are reorganized to fight as infantry and no extra resources are available, the engineers must still be ready to lay down their shovels, pick up their rifles, and man the ramparts. This they can do.

But fighting as infantry is only their secondary mission. What infantrymen really need to understand about engineers is the specific support they can provide on the battlefield in their primary role as part of the combined arms team.

Engineers bring to the battlefield a combat system that can help provide a maneuver unit with mobility, countermobility, and survivability. Only the maneuver commander can decide how to use his engineers at any given time, but to make the decision wisely he must take into consideration a number of things.

First, the commander should always include his engineers in his plans and decisions, requiring them to furnish estimates, analyses, and recommendations. And his plans for engineer operations should be developed along with his scheme of maneuver and his fire support plans, not later. The three must be coordinated, complementary, and mutually supporting.

During defensive operations, a maneuver commander's highest priority is usually countermobility, with survivability second, while in offensive operations mobility support is usually given the highest priority, followed by countermobility to foil counterattacks.

To stop or slow the enemy in the defense, engineers should be able to put in a system of obstacles and mines on any terrain that, when well-covered by defending fires, will cost the enemy valuable time and heavy casualties to breach. The enemy may get a few limited forces through the obstacle system early by placing an assault bridge over a tank ditch, for example, or by breaching a lane through a minefield. But many of these early successes should be countered — the assault bridge knocked out or the minefield breach blocked by a disabled tank. Even if the obstacle breaches cannot be completely closed, the enemy attack will be seriously channeled, presenting a significant advantage to the defender.

The construction of obstacles and the placement of mines by engineers

takes a lot of time, and maneuver commanders must provide them as much time as possible. Scatterable mines delivered by artillery or aircraft, on the other hand, can be emplaced rapidly to slow, disrupt, or even stop an enemy attack. The engineer should be the staff officer responsible for planning, coordinating, and recording all mine operations, which should include planning scatterable mine delivery systems for likely targets.

Once emplaced, obstacles and mines should be covered by fire. Therefore, the engineer should provide a copy of the obstacle plan to the fire support officer so that indirect fires can be preplanned to cover the obstacles and minefields. In this way, enemy elements that are stopped by the obstacles and mines can be effectively engaged.

Survivability work should also receive the commander's careful consideration. On the next battlefield, piles of dirt and holes in the ground will help soldiers to live longer and will keep their equipment and weapons from being damaged. But such work can easily consume all the available engineer support, so the commander must choose carefully what he wants to have dug in, and he should specify priorities for the work.

DIGGING IN

A commander should consider digging in his key command and control systems, lightly armored weapons, and vital supply points. His exact choices will vary with the situation, the mission, and the tactical plan. For example, in one instance he may decide to dig in his artillery to provide protection, while in another he may elect to have it move frequently to survive longer.

In a defensive situation, the commander will seldom know exactly how much time he will have before an attack, but he should use every bit of time he has — whether it is five minutes or five weeks — to prepare. By making good use of his engineer

resources, he can ensure that, with the passage of time, his defenses will become stronger.

A word needs to be said about digging in tanks and other armored fighting vehicles. The combined arms community does not seem to understand the value of hull down positions, even though an armored vehicle in a hull down fighting position is clearly less vulnerable to enemy fires than it is when standing exposed or moving. If a Soviet T62 tank fires on an M60A1 tank at 2,500 meters, for instance, it has a single-shot kill probability of .17 when the M60 is standing exposed, a .09 probability when the tank is moving, but only a .03 probability when the M60 is in a hull down position.

Some people argue that placing a fighting vehicle in a hull down position sacrifices its maneuverability. This is not true, or should not be, because a vehicle in a hull down position doesn't have to stay there any longer than its commander considers necessary. Heavy engineer earthmoving equipment can dig such a position in about twenty minutes.

Notwithstanding these statistics, armored vehicles should be dug in only in special cases and when there is plenty of time and extensive engineer support. Ordinarily, the most heavily armored weapon systems in a commander's arsenal should be very low on his priority list for additional protection. But in those cases where enough time and enough engineer resources are available, the maneuver commander should recognize the value of hull down positions and use them. Once the battle has been joined, certainly, armored vehicles must not be tied to those positions.

It should be noted that the engineers' ability to dig such positions will improve when the M9 armored combat earthmover (ACE) is issued to the field. Their present bulldozers are slow and vulnerable, but the ACE's mobility is comparable to that of other fighting vehicles, and its light armor will allow it to operate in forward areas under fire.

In the offense, to seize the in-



itiatve, retain it, and ruthlessly exploit it, commanders must be able to maneuver rapidly about the battlefield to concentrate their combat power. This means their units must be able to cross all obstacles and minefields with little loss of momentum. The engineer element, therefore, must be able to breach minefields and remove obstacles, and it must have assault, gap-crossing equipment.

But the entire combined arms team is involved in mobility support, not just the engineers, and its effectiveness depends upon well-rehearsed battle drills.

Throughout the history of warfare,

the most successful commanders have been those who made the best coordinated use of all their available forces. Superior combat power generated by effective leadership will probably be the key to success on future battlefields, and engineers are an important part of that combat power. To command a combined arms team in combat, commanders must study the engineer system, master it, and train with it, as they also must do with their other supporting arms. Those who fail to do so will pay a high price for their shortcoming.

And when they have to, these same

engineers can fight as infantrymen. If they can get all the extra personnel, weapons, and equipment that Major Bornmann recommends, that's great. But if they can't, they can still fight, as the Minutemen did, with whatever they happen to have.

COLONEL GERALD C. BROWN is a 1964 graduate of the U.S. Military Academy at West Point, New York, and holds a master's degree from the University of Illinois at Urbana. He has completed the Command and General Staff College and the U.S. Army War College. He is now assigned as District Engineer and Commander, Baltimore District, U.S. Army Corps of Engineers.

Guard Your Time

MAJOR GARY D. MAYNARD

Limited time may be the biggest problem today's National Guard unit commander has to face. Traditionally, his training has included basic instruction in food service, supply and maintenance procedures, and leadership, as well as instruction in the areas of human relations and counseling. But it has not included training in how to control that most important resource — time.

The National Guard commander's mission of training and increased readiness is essentially the same one the commander of an Active Army unit has, but there is considerable difference between the two when it comes to the training time that is available. An Active Army unit trains an average of 240 days each year, eight hours per day, which amounts to about 2,000 hours a year. But counting weekend drills, annual training periods, and training development sessions, a National Guard unit can count on having only 320 training hours each year, which amounts to about one-sixth of the time available to the Active Army unit.

How does a conscientious National Guard commander overcome the limited amount of training time? The answer is simple: The majority of the key personnel in a National Guard unit must work overtime without extra pay to meet the deadlines and requirements.

There are certain time-management

principles a National Guard commander can use to help him accomplish his mission. The most important ones are these:

- **Delegate Responsibility.** A National Guard unit commander must delegate everything he possibly can to his subordinates. Although he must keep certain responsibilities and authority for himself — unit fund, career counseling, and the like — most of his duties can and should be delegated to his junior officers and NCOs.

- **Set Priorities.** A commander must set priorities and see that his subordinates understand them.

- **Handle Paper Only Once.** If a piece of correspondence comes across a commander's desk he should take care of it promptly and decisively. If suspense dates are involved, he must make certain they are met, but if a piece of correspondence does not need to be kept in the unit and if no action needs to be taken on it, then it should be discarded.

- **Make Lists.** Knowing that he has only one 16-hour drill period each month, he must structure his time in advance and should have the drill organized at least one day ahead. His lists should be arranged in chronological order, and the items on it should be ranked by their importance. He should encourage his subordinates to develop their own lists and to use them during the drill periods.

- **Keep Meetings Brief.** All his meetings should be kept short and to the point. Subordinate leaders, too, should be trained to conduct the business of the day without numerous or lengthy meetings. And the meetings that must be held should be conducted primarily to coordinate job assignments and training times.

Time-management should be made part of the training all National Guard unit commanders receive, and they, in turn, should use that training to develop the same skills in their subordinates.

If National Guard unit commanders will use the time available to them during weekend drill periods in the best way possible, and if they will accustom themselves to practicing good time-management principles, they can overcome the "limited time factor." In addition, they will be able to compete equally well with Active Army commanders in their concurrent missions and will be far better prepared to handle their duties if they are placed in an Active Army status.



MAJOR GARY D. MAYNARD, assigned to the Headquarters Detachment of the Oklahoma National Guard, has served in numerous assignments with Guard units. He holds a master's degree from Oklahoma State University.

INFANTRY

A Prevailing Theme

LIEUTENANT PETER W. HARRIS
UNITED STATES NAVY



The Infantry has been around for a long time, longer than any other military arm, but it has not always been considered the Queen of Battle. In fact, over the centuries it has been alternately glorified and maligned, and its growth has been spasmodic rather than linear.

Various theories have been advanced to explain this cyclical development, but they have lacked a common theme. Some theories have held that the infantry simply shares the lot of the mass of the population at any given time, that only when man himself is afforded dignity by the social system is the infantry able to respond properly. Another theory is that the infantry is the democratic arm of the service and that wherever a democracy exists so does the man on foot.

Other theories attribute the rise and fall of the infantry to pure military science: the cavalry and feudal knights caused the use of infantry to decline. Still others cite technological innovations — the sword, the longbow, the

pike, the rifle, and finally the machinegun — as the chief reasons for the various high points in the development of the infantry.

But there has to be a great deal more to it than these theories suggest. An analysis of the infantry's peaks and valleys may lead to a prevailing theme that can be used to explain the process of its development and also to suggest its future usefulness.

The graph shown here is offered as a point of departure for such an analysis. Although some might argue about the battles, wars, and practitioners selected for it, as well as about the specific points assigned to them, the graph should prove useful to the discussion.

Records indicate that in the Assyrian Empire (1500-600 B.C., the low point of the curve) men on foot were clearly subordinate to charioteers, and that combat was often waged on an individual basis by mounted kings and nobles. Later the foot soldier was assimilated into the

Persian military forces, treated as a slave, and often flogged into battle.

By the fifth century B.C., though, the plight of the infantryman was rapidly improving. With the ascendancy of the Greek democratic city-state the man of foot had become a "hoplite," who was a free man and an aristocrat, and also a citizen-soldier who created his own laws. He fought side by side with his fellow infantrymen in a unit known as the phalanx, a hedgehog formation that relied on moral and physical solidarity. Its tactical strength and significance were evident at Marathon where its shock power completely routed the Persian host.

But the phalanx was not without its weaknesses. Its inherent solidity made it difficult to maneuver and exposed its flanks to attack. The great Theban general Epaminondas understood this, and his resulting remedy, the oblique order, enabled his outnumbered troops to defeat the Spartans at the battle of Leuctra.

Alexander the Great continued to improve the phalanx. After extending its range with a longer pike, he used it as a stable yet movable pivot upon which his cavalry could rapidly maneuver. Meanwhile, his light, mobile infantry served as the crucial hinge between the two forces and offered both protection and an offensive capability. The success of his war machine has been well-documented, and it may have reached its fruition at the battle of Arbela.

The infantry, though, had changed. It was no longer the hoplite who fought for his city-state or a member of the Sacred Band who swore allegiance to Epaminondas. Mercenaries had entered the ranks, and Greek civil wars ravaged the Aegean population. By the time Alexander died in 323 B.C., the phalanx was all but forgotten as

swarming horsemen fought for succession. It was not until the Roman legion manifested itself that the infantry once again came to the forefront.

The legion was an extension of the phalanx in flexibility. Composed of three lines of smaller groups called maniples, and made up of Roman soldiers exclusively, it was fused together by discipline, training, and exercise. It proved its worth in many a battle, perhaps most dramatically at Pharsalia, where Caesar demonstrated that a thoroughly trained and confident infantry could defeat a superior mounted force.

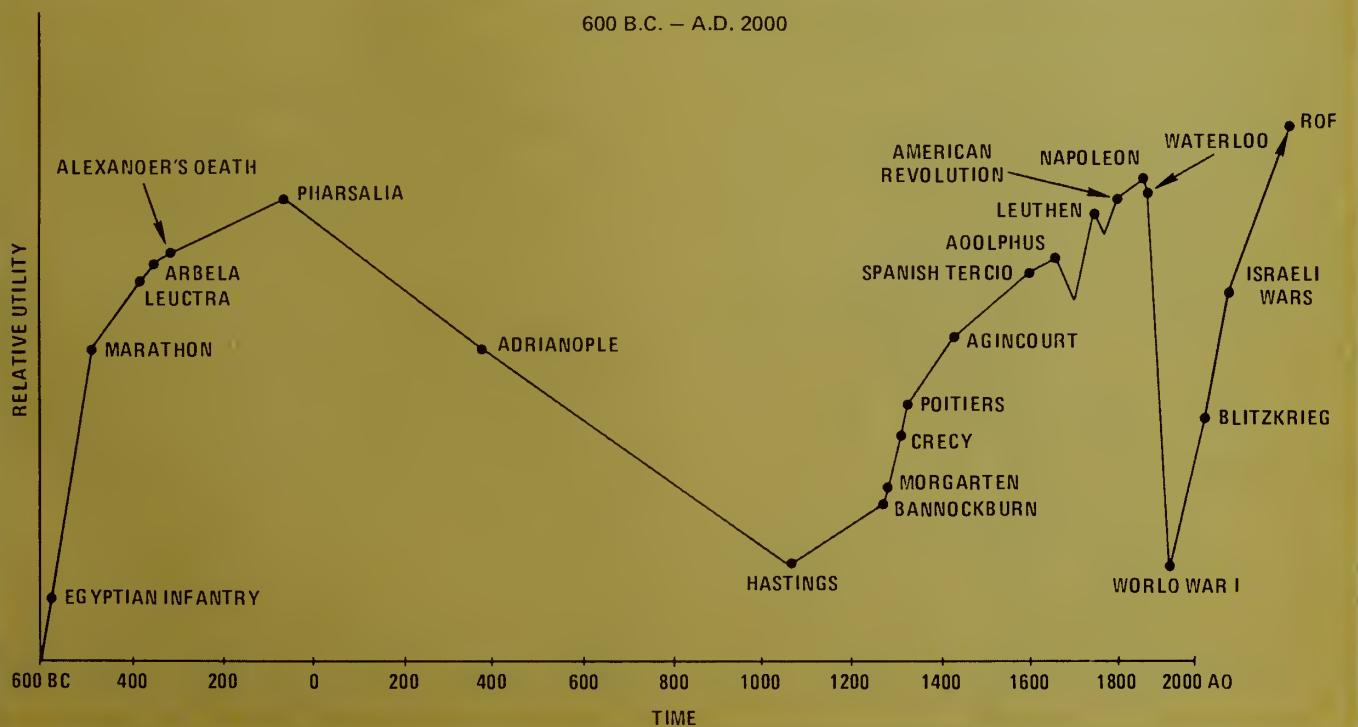
Infantry dominated Roman warfare for the next four centuries, even though fissures began to appear throughout the empire. Training and discipline in the legions were soon undermined by a less rigid entry procedure, which included the admission of alien soldiers. Weak and profligate rulers, furthermore, lacked the mobile reserves necessary to protect their garrisons from marauding barbaric tribes. When the Gothic cavalry finally charged at Adrianople, they met little resistance. Forty thousand men perished in what history has described as a vicious bloodbath.

Adrianople symbolized more than the fall of the western Roman Empire. As the curve indicates, the infantry declined into impotency for a thousand years. As man entered the Dark Ages, his military energy was diverted to the creation and organization of the cavalry. In fact, most historians agree that in the last half of the ninth century local levies of infantrymen were actually discontinued and replaced by horsemen. The man on foot was reduced to doing menial camp tasks and taking part in an occasional siege.

The foot soldier did receive some notice at the battle of

CYCCLICAL DEVELOPMENT OF INFANTRY

600 B.C. – A.D. 2000



Hastings. Although the Norman knights completed the triumph of cavalry over infantry, they did so only after King Harold's housecarls had proved themselves worthy opponents. Indeed, it seemed that if the foot-soldier only had better weapons and tactics, he might rise once more.

His prayers were answered in the 14th century with the advent of the English longbow and the Swiss pike. Together, they represented what the infantry had been missing since its rout at Adrianople: the principles of missile and shock. The curve reflects the infantry's restoration as a decisive arm from that point on. English knights were routed by Scottish pikemen at Bannockburn, and Swiss peasant infantry smashed the Hapsburg cavalry at Morgarten. Several decades later, French chivalry assured itself virtual extinction at the hands of English archers at Crecy, Poitiers, and Agincourt. But, for all the success of these bowmen and pikemen, they suffered from an inherent and inevitable limitation: a lack of military balance. The archers needed protection, and the pikemen needed mobility.

The Spanish solved this problem by combining the two branches into a single tactical unit called the tercio. With the development of firearms, archers disappeared and the ranks were equally divided between pikemen and musketeers. While the pike was used to repulse a cavalry charge, the musket's firepower enabled the infantry to attack. By 1600, the Spanish infantry had become not only self-sustaining but the dominant influence throughout Renaissance Europe.

But just as the Romans broke the Greek phalanx into maniples, so the Swedish tactician Gustavus Adolphus broke up the tercio. His legions were composed of specialized units deployed in a checkerboard fashion with musketeers outnumbering pikemen three to two. He continued to improve the musketeers' firepower by reducing the depth of their ranks, lightening their muskets, and introducing uniform cartridges for them. He also believed that morale and discipline were basic ingredients for a strong army. By using his highly motivated infantry in combination with his artillery and cavalry, he created one of the greatest armies in history.

So great was his influence on the foot soldier, in fact, that after his death in 1632 the importance of the infantry declined, and cavalry once again ruled the day as Cromwell and Turenne trained their mounted troops to be the exclusive striking arm. It was not until a new weapon and a certain Prussian practitioner arrived in the middle of the 18th century that the infantry finally regained its dominance.

FREDERICK

The new weapon was the socket bayonet, and its subsequent use permitted the infantry of musketeers and pikemen to be combined into one cohesive unit. Frederick the Great came along and demonstrated how drill and discipline could transform this unit into an automaton of maneuverability and firepower. Indeed, under his instruction, the steps of loading a musket were



practiced in such endless detail that his men could fire five rounds a minute as compared to two or three fired by soldiers in other armies. In addition, he developed light infantry troops for scouting and skirmishing as well as horse artillery to provide added firepower. Discipline among his soldiers was so severe that he often boasted that they were more afraid of his officers than of the enemy. As a result, his troops were highly effective.

Frederick's greatest victory came at Leuthen when his oblique order shattered the entrenched Austrians. The battle remains an epoch in military history where masking, mobility, precision, and surprise were fully implemented. It also marked the final demise of cavalry because of Frederick's obsession with firepower. The horse had simply become too large a target for a well-trained infantry.

Ironically, the potency of firepower also changed the infantry, which had become vulnerable in its traditional phalangeal formations. Across the ocean, for instance, the precise drill and columns sometimes came up against American colonists who had adopted flexible Indian tactics to harass the rigid lines of the British.

The effect of the American Revolution on the legitimacy of linear tactics also had a profound influence on Napoleon, who immediately embraced this new strategy, effectively using skirmishers to prepare the final advance of his columns. But as the Napoleonic Wars drained the resources of France, and as Napoleon began to rely more on his artillery, the man on foot was again gradually pushed into the background.

The infantry continued this slide well into the 19th century. In Europe, conservative generals who could not shake off their parade-ground mentality watched helplessly as their conventional columns were decimated by superior firepower.

In World War I the infantry succumbed to a new weapon, the machinegun. No longer did the infantryman probe for open flanks when frontal assaults became useless. Instead, he dug in and merely occupied ground that the artillery had conquered. From medieval camp follower to housecarl at Hastings to modern barrage

follower, the man on foot had ultimately completed his second cycle and reached another low point on the curve.

It was during World War II, Korea, and Vietnam that the foot soldier gradually became modern, mobile and mechanized. Along with the development of the German blitzkrieg, he was being dropped by parachute, landed in special amphibious craft, and supported by low-flying tactical aircraft. Linear warfare was discarded for infiltration tactics, with platoons moving in assault echelon. He gained ground by using superior firepower and was often supported by tanks and artillery.

But the nuclear era did not make his war any less personal. Battles were still fought on his level, and it was ultimately his courage and his intuitive guile that produced final victory.

What conclusions can be drawn from the history of infantry as shown on the curve? Previous theories that have

been essentially a cheng and that it has been successful only when accompanied by the ch'i. There have been isolated cases, of course, in which the cheng has been strong enough to exist without the ch'i — Swiss pikemen, for example — but usually the two must exist together. Alexander's army is a perfect illustration. While his phalanx (the cheng) gripped the enemy by the throat, his cavalry (the ch'i) would swing in with the knock-out blow.

In fact, the entire infantry curve can be viewed through this lens of fix and maneuver. When both were present, such as at Arbela and Austerlitz, the infantry gained decisiveness as an arm. When this maneuverability disappeared, infantry was less useful. The "troughs" of the curve created by Adrianople and by the Maginot mentality of World War I show that the infantry had lost its mobility and, with it, its ability to maneuver.

Skeptics would argue that this theory presupposes a supporting arm, whether artillery or cavalry, and that the infantry as a detached arm has little or no importance. But military analysts usually classify an offensive force as one that combines four elements — mobility, protection, striking power, and holding power. Clearly, cavalry and artillery can provide a strike capability, but the infantry with its inherent capacity for occupying a large area is indispensable in conquering an enemy. Furthermore, infantry that has been able to combine all four elements has been the most successful.



explained the rise and fall of infantry neglected the art of war as it was conducted by its greatest practitioners, and this disregard has confused and clouded the issue. I see the common elements of the peaks and valleys in the development of infantry as being simply a case of leverage.

CHENG AND CH'I

The dominant and prevailing theme, then, in this rise and fall seems to be related to Sun Tzu's tactics of cheng and ch'i. The Chinese philosopher described the former as a holding power and the latter as forcing a decision by flanking or encircling. I contend that infantry has always



History has proved this point. The Greeks, with no artillery or cavalry, achieved near perfection at Marathon and Leuctra, both classic examples of cheng and ch'i, to gain leverage over an opponent. In more modern times the German blitzkrieg exploited the subtleties of Sun Tzu's tactics through deception and surprise. It successfully weakened the enemy with quick thrusts and finally maneuvered to shatter his will to resist. The combination of cheng and ch'i in this respect is more than a fix and maneuver game. It is a philosophy of the indirect approach, a conflict in which a unit never knows from which direction it is going to be hit next. It is this infinite ability to deliver combinations of punches that makes cheng and ch'i such a menacing threat. Warfare is no longer just physical; it has also become a mental and moral struggle.

I maintain that loyalty to these principles of deception and surprise has distinguished the great leaders of the past and made them artists rather than merely artisans of warfare. The points on the curve reflect this loyalty, and the lack of it. Napoleon's rise and fall, for example, is predicated primarily on the application of cheng and ch'i. In his early campaigns he cloaked his plans, generated misinformation, and followed up his dispersed components with tactical concentrations. It was only when he started to rely on his heavy artillery that he became rigid and predictable. As Wellington said of Waterloo, "Napoleon did not maneuver at all. He just moved forward in the old style and was driven off in the old style." Napoleon's defeat was perhaps inevitable when he departed from cheng and ch'i.

Certainly technological and sociological developments have also contributed to the highs and the lows in the development of infantry. The advent of improved weapon systems, for example, has helped redefine the infantry's role in combat over the years. But, unfortunately, historians have tended to overemphasize the role of science and to completely ignore the operational side of warfare, and herein lies the problem. By neglecting strategy and tactics, they have given us a false representation of infantry's usefulness.

Despite these other influences, the philosophy of cheng and ch'i does seem to be the prevailing theme. It has been around for more than two thousand years, and whether fidelity to it at various times has been conscious or accidental, the infantry leaders who have incorporated its basic concepts have been the most successful.

IMPLICATIONS

But does this ancient philosophy of Sun Tzu's have any implications in modern combat? And if it is really a prevailing theme, will it continue to be valid in the future? The answer on both counts is a most emphatic yes. In fact, the concept is very much alive today, though disguised under a new label — maneuver warfare. It has sparked a new debate, in fact, on the employment of maneuver versus attrition. Which side will win in a showdown is naturally a question of primary concern.

But the answer seems clear. Since the average U.S. in-

fantryman can expect to go into battle outnumbered and, on a weapon-for-weapon basis, outgunned, it seems ludicrous to have him engaged in an attrition contest. Only the side with material superiority can afford to do that. The Israeli campaigns against her neighbors certainly demonstrate this point quite convincingly.

Unfortunately, and although the Vietnam experience demonstrated the folly of attrition, the U.S. still seems to have delusions of material superiority. The fact is that most military analysts still cling to that old myth that hardware is first. Only when we return to Sun Tzu's concept of the direct and indirect approach can we understand that warfare is primarily a mental conflict and that to win without fighting is the essence of skill.

The U.S. response to the various threats it may have to face around the world is its Rapid Deployment Force (RDF), but its potential use remains a mystery. The Joint Chiefs of Staff are no doubt asking the same question that Alexander asked at Arbela and that Caesar asked at Pharsalia: How does an inferior force defeat a larger one? The answer is that it finds a way to distract the enemy and at the same time deliver a death blow to his flank or rear, which is the essence of cheng and ch'i.

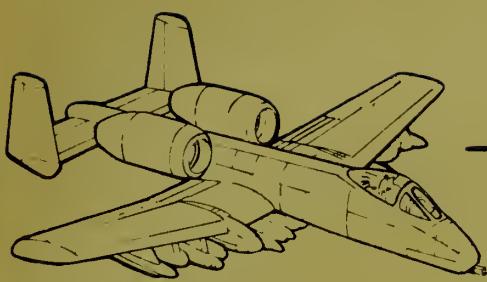
The present RDF, however, is incapable of executing such an offensive philosophy. What is needed is a small, agile, tactically capable intervention force, governed by a single, unified command supported by sea power and similar to today's U.S. Marine Corps. The battalions assigned would be the elite of the elite, a modern infantry with not only protection and mobility but a holding and a striking power as well. The foot soldier in its ranks would define a new apex on the curve and establish a whole new dimension in the development of infantry. Such a force would represent a hand-picked infantry that sought to revive the real infantry tradition of the phalanx, the legion, the tercio, the French column, and the art of maneuver warfare.

One thing remains certain. The passage of time may have revolutionized the battlefield, but infantry's presence and principles remain unchanged. When the smoke cleared from the bomb craters on the Ho Chi Minh trail, it was the American foot soldier who ultimately closed with the enemy and rooted out the obstinate defender.

In the future, as in the past, the infantry forces that adhere most closely to Sun Tzu's concept of cheng and ch'i will form new high points on the curve of infantry development.



LIEUTENANT PETER W. HARRIS, USN, a 1976 graduate of the U.S. Naval Academy at Annapolis, Maryland, is now completing a master's degree in the National Security Studies Program at Georgetown University. He attended flight training at Pensacola, Florida, and then served with Attack Squadron 85 as a Naval Flight Officer until 1981.



THE MECHANIZED INFANTRY BATTALION TASK FORCE IN THE AIRLAND BATTLE

Lieutenant Colonel Jimmy Griffis

Major Kurt Pierce

Major Ed Sherwood



In the next few years, the Army will undergo a number of far-reaching changes, not only in its organizational structure — Division 86, for example — but in its adoption of major new weapon systems. The results will influence how the Army will fight.

The AirLand battle concept is the Army's strategy for implementing these changes. It encompasses a battlefield on which integrated operations will be conducted throughout its depth and extended deep into enemy-held territory.

The U.S. Army Infantry School is considering some ideas for developing combined arms doctrine for the AirLand battle concept and, at the same time, is taking a number of steps toward implementing the concept. The ideas on both development and implementation focus on a mechanized infantry battalion task force and on how the integrated and extended aspects of the AirLand battle might affect it.

INTEGRATED BATTLEFIELD

A task force commander whose unit is committed to fight on an integrated battlefield will have many things to consider, some of them not necessarily new to him. He will still have to plan to disperse his forces over a wide area; he will still have to be able to concentrate his units quickly at the proper times and places; and he will still have to know how to use the terrain for its shielding effects and the weather to limit his opponent's vision. Similarly, his units will still have to know how to detect toxic agents and how to take the proper precautions for

operating in a contaminated environment.

What will be new is the need for him and commanders at all echelons to incorporate these considerations into their planning and training. Thus, in a defensive operation, the terrain that offers the best position in a non-integrated environment may not be the best terrain on which to position units that face the threat of a nuclear or a chemical attack. This may force the battalion to prepare defensive positions in valleys, other low areas, or towns to place cover between it and the nuclear explosions or chemical agent. And positions that provide good protection against the effects of nuclear weapons may be poor ones for gaining protection against chemical agents.

Plans must be made to move from these positions to better, more defensible terrain after the enemy has employed his weapons but before he closes for the attack. Of course, the task force must also be prepared to fight from its original positions if its opponents should launch an attack immediately after using a nuclear weapon or toxic agents, or if the terrain has been so altered by a nuclear blast as to make a move impractical.

The task force commander must also consider this possible alteration of terrain, because blast effects or contaminated zones can make good avenues of approach impassable, close roads and supply routes between battle positions, and completely alter fields of fire. Positions planned for combat support and combat service support units may also become unusable. Accordingly, the task force commander and his principal subordinates must be ready to make the necessary changes in their unit dispositions before the opposing forces get too close. Engineers must be used wisely because of the assistance they can



provide in digging in and in clearing obstacles.

To counter his opponent's weapon systems, the task force commander can take a number of actions before and during the battle. Deceptive measures are among the most important and must accomplish two things: they must deceive the enemy as to the intentions of the task force, and they must present a false picture of the units' actual dispositions. As his defenses are thinned out to obtain necessary dispersion, the commander must make the enemy believe that a strong, cohesive defense is still in place. Otherwise, the enemy may concentrate his forces and conduct a hasty attack. But in painting such a picture of combat strength, the task force commander must be careful not to paint such a rosy picture that it encourages the opposing force commander to use a nuclear weapon against him.

Further, all combat systems must be protected, particularly the task force's radios, wire nets, and computers, since these are most vulnerable to the electromagnetic pulse from a nuclear explosion. The task force's soldiers can also be ordered to wear all their protective clothing. While this clothing might diminish their in-

dividual performance, it does provide them a good measure of protection that could well mean the difference between winning and losing a battle.

At the same time, the commander should expect a nuclear or chemical attack against his units to cause a large number of personnel casualties and much damage to equipment, as well as psychological stress on an unprecedented scale. The evacuation of personnel casualties and the repair and replacement of equipment will require herculean efforts from all concerned.

If the task force does successfully withstand the blast effects from a nuclear explosion, it will then have to contend with radioactive fallout. The same will hold true for a chemical attack. Because platoons or companies may have to be taken from the front lines to be decontaminated, a process that could take several hours, it is safe to assume that, at times, units may have to fight with contaminated personnel and equipment before they can be withdrawn.

Plans for reconstituting the task force when the need arises must be made above task force level. The brigade reserve can be used to replace a forward unit, for exam-

ple, and that unit can then be moved to a reserve position where it can be reconstituted. The battalion can also help itself by using "straggler platoons" to reconstitute companies.

Although the integrated battlefield will be a challenge, to say the least, it should not be put in a "too hard to handle" box. Instead, how to handle it should be considered now and included in all operational planning and training programs.

THE DEEP BATTLE

The integrated battlefield can be thought of as having three complementary components: rear area combat operations, the close-in battle, and the deep battle. Battalions and brigades are normally most concerned with the close-in battle. Divisions and corps fight the close-in battle and the deep battle as part of a unified battle plan.

The goals of the deep battle are to take the pressure off the forces conducting the close-in battle, and to create opportunities for those forces to eventually initiate offensive operations. The objective is to take away some of the opposing force's combat power that might otherwise be brought to bear against the units conducting the close-in battle. Thus, deep attacks can be made against an opposing force's reserve or follow-on units, against its command and control facilities, or against its supporting infrastructure.

While the deep attack usually will be conducted with long-range weapons, including air interdiction sorties, ground maneuver units may conduct deep attacks, either by air assaults or by deliberate ground attacks by combined arms forces equipped with Bradley fighting vehicles and Abrams tanks. Thus, a mechanized infantry battalion task force could be sent around an opposing force's lines or through a gap in them to attack "soft" targets 10 to 15 kilometers behind the front lines. Typical targets would include artillery units, air defense weapons, logistical installations, and command posts. Limited attacks could even be made against maneuver units.

The deep attack itself will closely resemble a raid in that the attacking force should hit quickly, inflict the greatest possible damage, and get out before the opposing force can react. On rare occasions, plans could call for linking up with friendly units at a designated place after the deep attack force had carried out its mission.

Admittedly, the decision to commit a battalion task force to a deep attack could be a risky one. But the tremendous payoff that could result from a successful operation makes it definitely worth considering. It is an operation that is normally planned and controlled by division -- the attacking task force must be augmented with enough combat support and combat service support assets to allow it to accomplish its mission and get back to friendly lines. These must include engineer, air defense artillery, and attack helicopter units.

If a decision is made to use a battalion task force in a deep attack, certain requirements must be met before it is sent off.

- The operation should be planned and controlled by

the headquarters of the division to which the task force belongs.

- Intelligence data must be accurate, detailed, and continuous.

- The terrain and weather must lend themselves to a deep attack.

- Fire support, from artillery units and from aerial elements, must be immediately available to the task force all the way to the objective.

- The task force must have plans for treating its personnel casualties since their evacuation might be difficult at best.

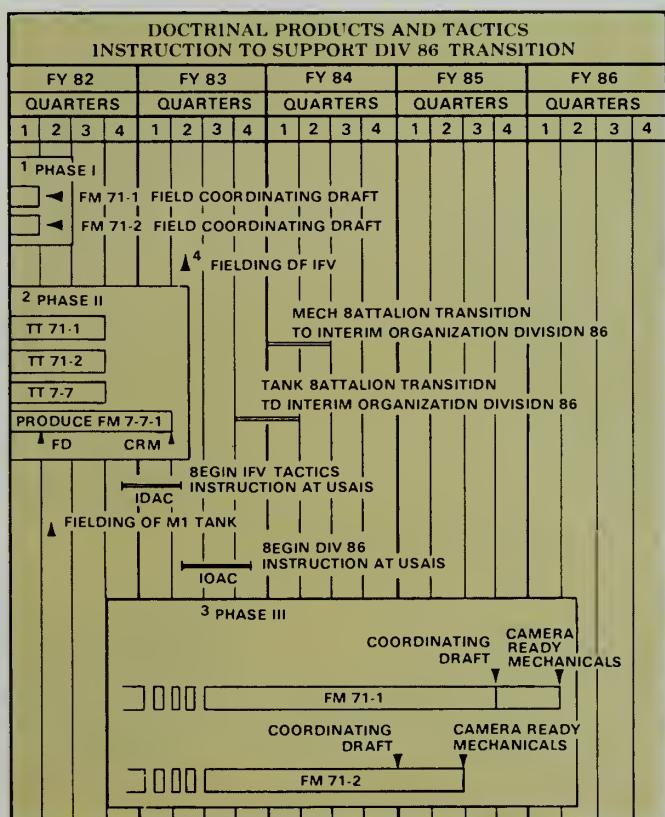
- Damaged or disabled vehicles, weapon systems, and other equipment will have to be destroyed in place, and the task force must carry along the necessary means to do the job.

- Detailed plans must be made for the task force to re-enter friendly lines, either as a complete entity or broken into smaller elements.

IMPLEMENTATION

The Infantry School recognizes the importance of implementing the AirLand battle concept as quickly as possible. The dates for the introduction of the new family of fighting vehicles and the Division 86 organization, and for the preparation and use of new doctrinal literature are shown in the accompanying chart.

The development of the Bradley Infantry Fighting Vehicle (BIFV) and its introduction into the Army in early 1983 will form the centerpiece of the Infantry's con-



tribution to the AirLand battle. The Infantry School's BIFV training strategy has been developed to help units field the new vehicles.

The development of doctrinal literature to support that strategy is an important aspect of the School's overall program as well. Based on guidance in the Division 86 Transition Plan, published by Headquarters, Training and Doctrine Command (TRADOC), 8 April 1981, the Infantry School and the U.S. Army Armor Center (USAARMC) have jointly agreed to produce doctrinal publications in three phases.

Phase I includes reviewing FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force*; FM 71-1, *The Tank and Mechanized Infantry Company Team*; and FM 7-20, *The Infantry Battalion (Infantry, Airborne, Air Assault)*. The revision will be based on the changes in doctrine in the latest edition of FM 100-5, *Operations* (Draft). The manuals themselves will be based on the H-series TOE and on such current equipment as the M60 tank and the M113 armored personnel carrier. The manuals are to be fielded in coordinating draft form (soft cover) by April 1982.

Additionally, the Infantry School has sent Special Text 7-7-1, *The Mechanized Infantry Platoon and Squad (BIFV)*, to all service schools and to selected field units and headquarters for review and comment. After the Active Army has converted to the Division 86 organization, all of these manuals will be used by the Reserve Components until they, too, have been reorganized.

During Phase II, the Infantry School will develop training texts (TTs) for mechanized infantry units, and the Armor School will develop training texts for armor units. TT 71-2, *The Mechanized Infantry Battalion Task Force*; TT 71-1, *The Mechanized Infantry Company Team*; and TT 7-7, *The Mechanized Infantry Platoon/Squad* will be fielded by the Infantry School before 1 July 1982.

These Phase II texts will expand on the Phase I publications to include doctrine for units organized under a Division 86 interim organization and equipped with either old or new equipment, or both. More specifically, these texts will tell a commander how to conduct a battle if his organization is equipped with M1 tanks and M2/M3 fighting vehicles, or with a mixture of M1 tanks and M113s or of M2/M3s and M60 tanks. FM 7-7-1, *The Mechanized Infantry Platoon/Squad (BIFV)*, will also be fielded during this phase.

In Phase III, FM 71-2 and FM 71-1 will be developed

to provide the doctrine needed by units that are organized under the Division 86 scheme and completely equipped with the new systems. These efforts will begin in the latter part of Fiscal Year 1982, but drafts of the publications will not be fielded until the latter part of Fiscal Year 1983.

A second and equally important feature of the overall plan will be the introduction of the AirLand battle concept into the Infantry School's instructional program. The integrated battlefield is now being taught, and classes in the Division 86 organization and in the tactics associated with the BIFV have already begun. Specifically, the transitional mixtures of vehicles (M113/M60A3, M1/M113, M2/M60A3, and M1/M2) and the effects of these mixtures on task organization and tactical employment are being discussed, as well as the effects of the addition of a maneuver company and an antitank company in a Division 86 battalion.

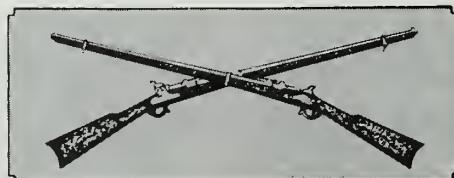
The Commandant of the Infantry School has also begun a program to disseminate information to the field on the doctrine and training needed to support the fielding of the new weapon systems, the Division 86 organizations, and the AirLand battle concept. The initial package in that information program, entitled "Dialogue 82," consists of television tapes and magazine articles such as this one.

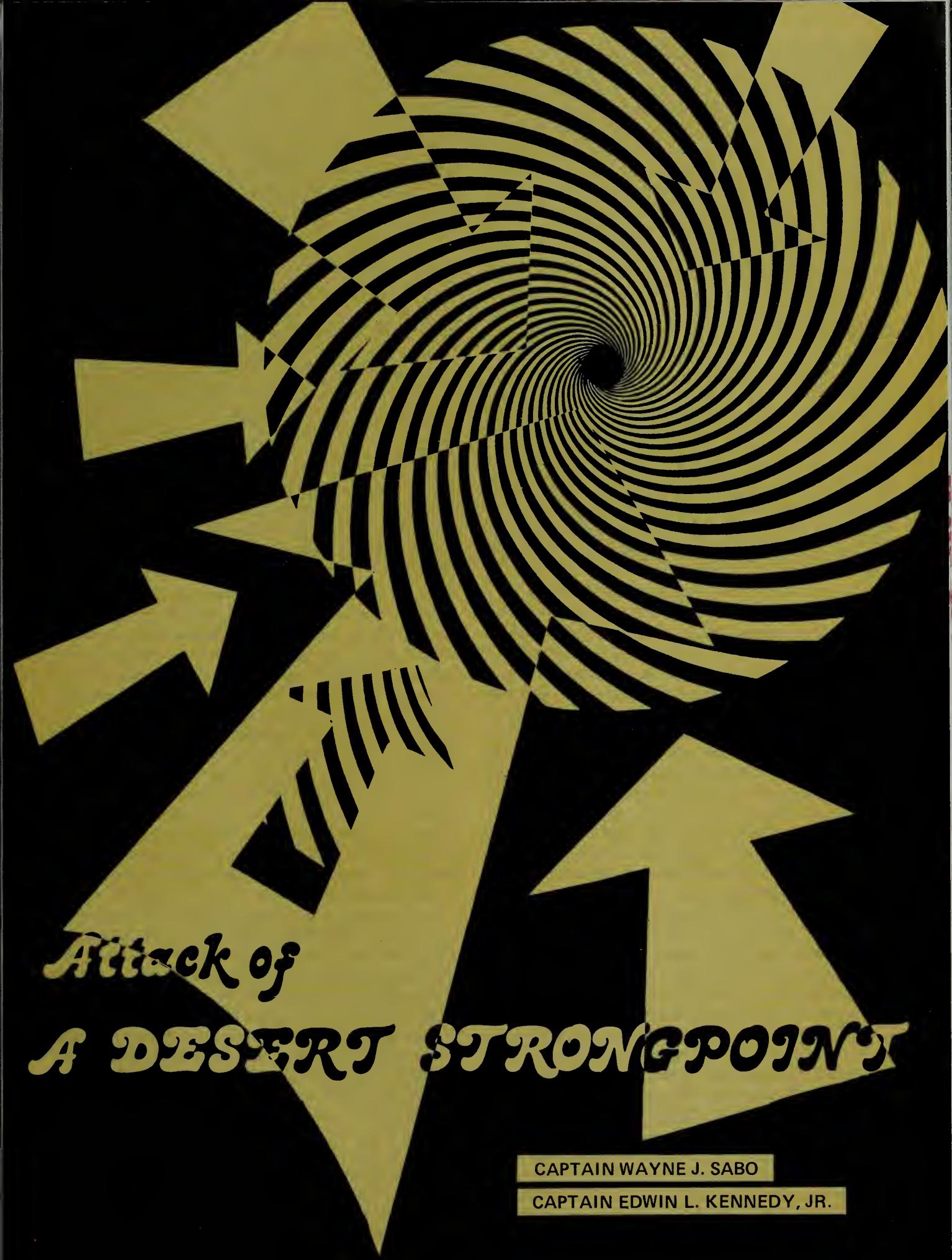
THRESHOLD

In the months and years ahead, the Army will undergo many changes, and the Infantry School finds itself on the threshold of a major undertaking. Its initial task is to inform the infantry community on what is happening and to make plans that will help it implement the AirLand battle concept, field the new systems, and move into the Division 86 organization as painlessly as possible.

During the critical transition period ahead, infantry units must be ready to fight if they are called on. The Infantry School feels that the efforts it has begun will help infantry units everywhere to accomplish that goal.

THE AUTHORS, at the time they prepared this article, were serving as writers of the Infantry doctrine at the U.S. Army Infantry School. Colonel Griffis was chief of the Doctrinal Literature Division of the Command, Tactics, and Doctrine Department. Majors Pierce and Sherwood were senior project officers in that Department.





Attack of
A DESERT STRONGPOINT

CAPTAIN WAYNE J. SABO

CAPTAIN EDWIN L. KENNEDY, JR.

The Army's battlefield of the future may be anywhere in the world, and its units must be prepared to fight on it no matter what its terrain or its climate. At the moment, national interests have dictated that the Army pay particular attention to areas such as the Middle East where large desert areas exist. Accordingly, more and more of the Army's training efforts, particularly at the National Training Center at Fort Irwin, California, are being devoted to training units to fight in desert areas.

Unfortunately, one subject that is not usually discussed in either today's training literature or training programs is the proper way for armor and mechanized infantry units to conduct assault breaching of desert fortifications. And nowhere in that literature are there detailed descriptions of the kinds of fortifications that are most likely to be found in the deserts of the Middle East.

Although desert strongpoint fortifications have played an important role in several wars of the past, including World War II, they could usually be bypassed. But in more recent wars such strongpoints have become more important for several reasons: the extended ranges of antiaarmor weapons, the predominance of open terrain, and the ability of the opposing forces to create mobile reserves. During the 1973 Mideast War, for example, strongpoints became an important consideration for the attacker, and some valid lessons have been learned from these experiences.

Two major types of strongpoint fortifications were identified during the early stages of that war. These featured a 360-degree defense, combined arms integration, extensive obstacle systems, and mutual support.

One of the two made only a brief appearance. It had a circular construction with a central command post and with trenches radiating from the center like the spokes of a wheel. These, in turn, led to semi-circular trench systems. The faults of this type of fortification became evident when it was found that the ground level trenches were poor locations from which to gain extended fields of fire, because they could be suppressed or isolated and then reduced. Besides, trench systems did not lend themselves to the terrain. The ground was either too hard or rocky for ditching machines or too soft and sandy to support trench systems.

It was because of the nature of the terrain that the other type of strongpoint fortification came into being. This was the *pita*, so-called because of its similarity to the round loaves of bread baked by the inhabitants of the Mediterranean area. It provided the answer to many of the problems of the other type of fortification, and it is the one that is in general use throughout the Middle East today (see Figure 1).

The *pita* is formed by bulldozing the topmost layer of soil from the inside and outside of a planned fortification to form a circular berm. The benefits are immediately apparent. Unlike the trench system used with the other type of fortification, the berm provides an excellent obstacle to vehicle movement and acts as an excellent firing platform. In fact, in relatively flat or open terrain the berm itself becomes the "dominant" terrain from which a defender can obtain excellent observation and fields of

fire. The berm's height — some three to five meters above the desert floor — also helps to negate the effects of heat haze in the summer by providing a raised firing platform.

The *pita* does have some weaknesses. Although its circular shape offers all around security, it also limits the number of weapons a defender can bring to bear on a particular field of fire. And while it can be quickly constructed, the basic *pita* does require a lot of labor and material resources if any kind of improvements at all are going to be made to it. For example, positions dug into the top of the berm and connected with trenches, overhead cover for those positions, bunker complexes, and obstacle systems will all call for the commitment of considerable numbers of men and amounts of material. Standard barrier and obstacle systems — antitank ditches, mines, protective wire — are used with each *pita*.

In addition to the system of protective wire and personnel mines that surrounds the *pita* itself, a series of major obstacles is normally placed across the armor avenues of approach to the *pita* (see Figure 2). Out 400 to 500 meters in front of the *pita* is the first of these — an antivehicle minefield 80 to 120 meters deep. This minefield protects the approach to an antitank ditch, which is designed to halt an attacker or to canalize him into the *pita*'s crew-served weapons' fields of fire. Additionally, the berm on the far side of the ditch acts as an initial defensive position for infantry skirmishers.

A number of *pitas* are usually built at the same time one to two kilometers apart, and these are echeloned with some three to four kilometers between echelons. Each echelon is organized into battalion and company defense sectors, and the *pitas* within each echelon are mutually supporting. Second echelon forces may also provide supporting fires in depth to prevent the flanking or encirclement of a first echelon *pita*.

Although the positioning of *pitas* one to two kilometers apart may seem excessive for preventing infiltration by an attacker's infantry elements, their primary purpose is to form an obstacle to armor movement. The *pita* itself is a physical obstacle to mounted movement, because its walls are too steep for tracked vehicles to climb over.

The typical *pita* is organized around the combined arms concept of infantry and armor and is designed to facilitate the use of armored vehicles from within. Thus, tank firing ramps are usually built along the inside walls to permit the tanks to fire out of the *pita* from hull defilade positions. Antiaarmor elements cover the armor avenues of approach from positions built into the walls of the *pita*. Antitank guided missiles (ATGMs) are located in firing ports in the berm and are usually provided with some kind of overhead cover. Mortars can be easily sited within the *pita*, where they are relatively safe from an attacker's direct fire.

Direct fire small arms positions are also usually placed in covered positions with firing apertures. Machineguns are most often given this type of position, while rifle pits are located along the top of the berm in a trench line. Recoilless weapons are put in firing positions along the

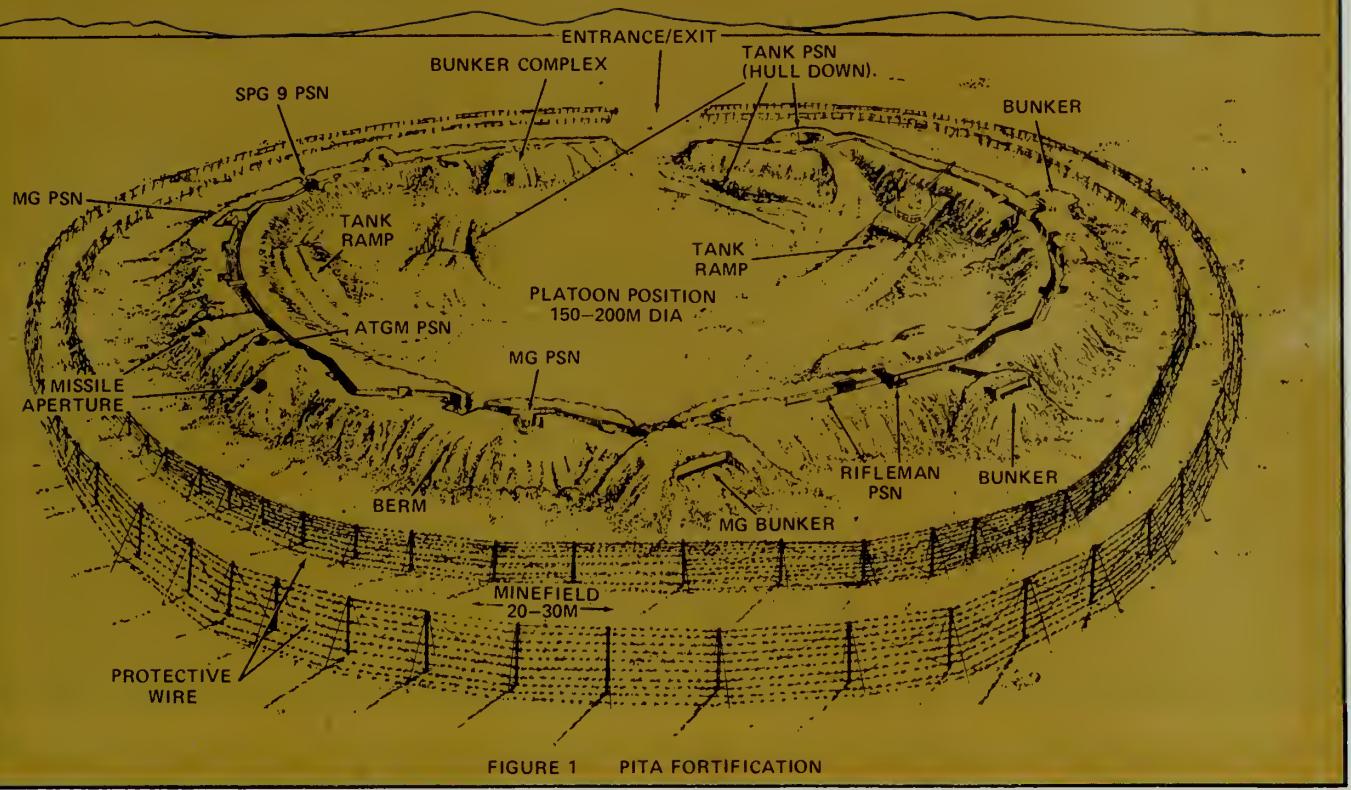


FIGURE 1 PITA FORTIFICATION

top of the berm to allow for their backblasts.

Pitas vary from platoon to company size, with the platoon size being the most common. The diameter of the interior of the platoon fortification ranges from 150 to 200 meters. One opening, for entrance and exit, located toward the defender's rear, is protected by weapon emplacements. Armored vehicles that operate initially outside the fortification can move inside to their prepared positions when the situation demands it. Bunker complexes for command and control and for troop quarters are built into the side of the berm. Supplementary positions are also constructed when there is time, and these allow the strongpoint's forces to shift around inside the pita without being exposed to an attacker's direct fires.

It was found during the 1973 war, and confirmed since then, that bypassing or neutralizing a pita is difficult at best, because an attacker is actually going up against a belt of fortifications. He must, therefore, force his way through each defensive belt, the first of which is generally the best prepared. Once he breaks through the first belt, he must then retain the initiative and, more important, the momentum of his attack if he is to overcome the second and third belts. But the task is not an impossible one. If the attack is forced home vigorously, pitas can be overcome and the defensive belts disrupted.

SUPPORT EQUIPMENT

Conducting an assault against such a defensive system requires meticulous planning and an abundance of special support equipment. Engineer support is especially critical. Unfortunately, some of the Army's present sup-

porting equipment leaves a lot to be desired.

The projected charge demolition kit, M157 (a tank-emplaced bangalore torpedo), for instance, is bulky and difficult to handle and assemble under battle conditions. In fact, in a desert environment, the M157 is not a desirable system to use for breaching an obstacle.

The projected charge demolition kit, M173 (boat charge), is better for breaching, even though it, too, has some drawbacks — it cannot be pulled long distances, it cannot traverse rough terrain, and it is slow. But it is rocket projected, is easy to use, and does not require a lot of time to emplace.

Another problem the Army has not yet solved is locating and marking an opponent's minefields. Its present methods are slow and extremely hazardous for the soldiers involved. The developmental models of mineroller tanks now being used in Europe seem to provide the best answer to the problem, because they can move across open terrain quickly and can find as well as detonate mines. If these specially equipped vehicles can be procured in sufficient numbers for all units then the task of breaching minefields under combat conditions will be greatly simplified.

In addition, the Army still needs more and better assault bridging equipment and combat engineer vehicles (CEVs) to assist its units in crossing such obstacles as antitank ditches and wire entanglements. The only items of assault bridging equipment either now in the Army's inventory or projected for the near future are the present armored vehicle launch bridge (AVLB) and its replacement, the BR80.

Some small items of special equipment that can be used by infantry assault units can usually be acquired more

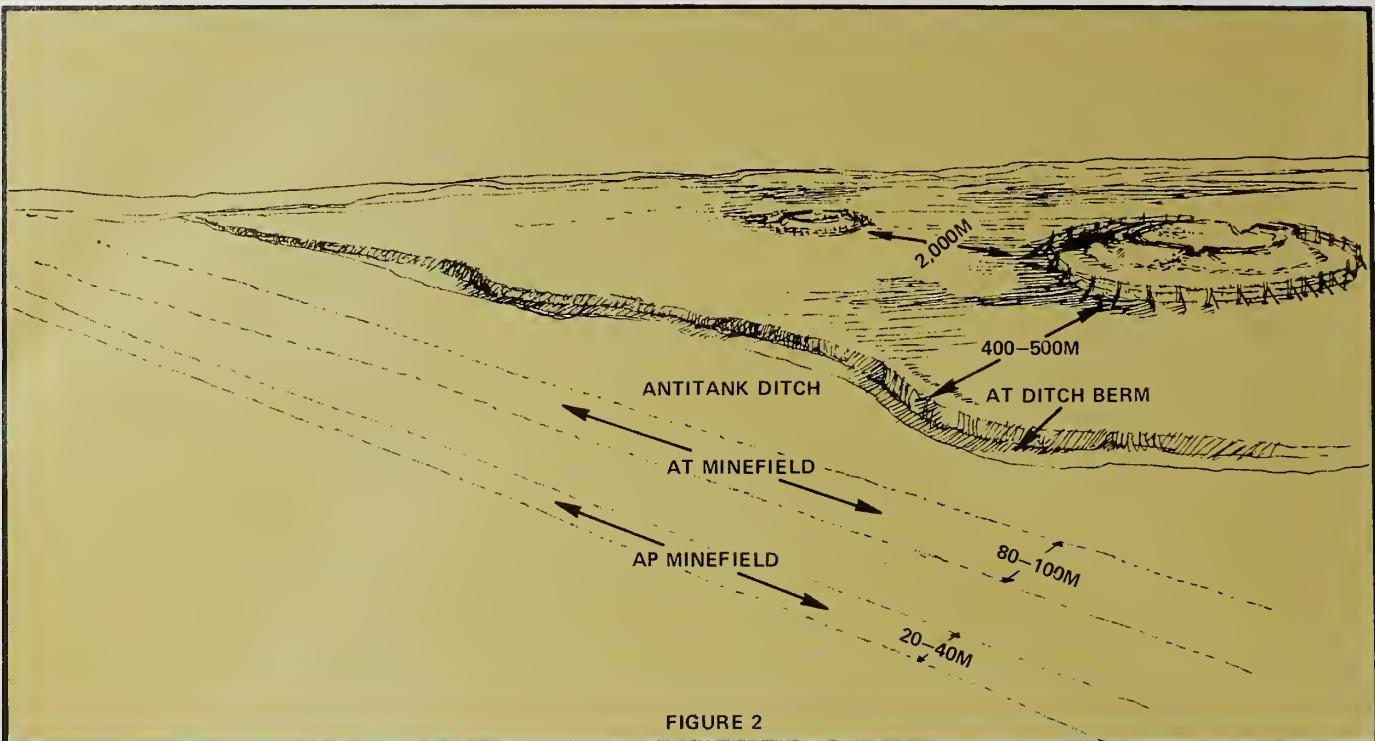


FIGURE 2

easily or can be fabricated at the unit level. These include scaling ladders, wire cutters, bangalore torpedos, and lane-marking poles and tape.

After the equipment needed for an assault has been gathered and prepared, the assault unit, if possible, should hold a rehearsal over ground that is similar to that around its objective. Mock fortifications and ditches should be built to familiarize the leaders and the troops with their specific tasks. The distances and fortifications should resemble as closely as possible those that will be encountered.

Additional quantities of ammunition must also be arranged for. Indirect fire support will play an important role in any attack against a pita system, and suppressive fires as well as obscuration fires can determine the success or failure of an assault. Sustaining an effective smoke screen between the pita and the friendly forces, for example, can require ammunition in amounts not usually carried in a basic load.

The attacking force should be organized according to function. Thus, support, breaching, and assault elements should be organized for, and assigned, specific missions. The breaching element should consist largely of infantrymen to take care of any of the opposing force's soldiers who might be deployed on the berm of the antitank ditch to delay the attacker's advance. The assault element, too, should contain mostly infantrymen so that it can assault and clear the pita itself. The support element, primarily armor units reinforced with ATGMs, should engage any antiarmor weapons and exposed armored vehicles, and exploit the successes of the assault element.

Since pitas are built to be mutually supporting, the approach to any one of them should be as much as possible to the side that masks the fires from a supporting

pita. If this is not possible, the pita should be approached from the closest position that provides cover and concealment.

This is how a mechanized infantry company as part of a larger force, with a tank platoon, engineers, and three minerollers attached, might go about attacking and reducing a platoon-sized pita. It must be assumed, of course, that other pitas in the defensive system will be under attack at the same time.

The attack should be conducted rapidly to achieve surprise and to prevent the enemy from employing his mobile reserves. Artillery fire should initially suppress and destroy the infantry around the antitank ditch and its berm. Support elements that are providing overwatch should engage antitank weapons and exposed armored vehicles when the assault begins.

The company team's task organization would probably look like this: the three mineroller tanks, one with an M173 demolition charge, in the lead, followed by an engineer M113, the company team commander in another M113, a mechanized infantry platoon in four M113s, an AVLB, a CEV, two more tanks, and, finally, two more infantry platoons, each with four M113s.

Movement into the actual assault phase would be conducted with the mineroller tanks leading. The two tanks without the M173 charge would move forward, keeping about 100 meters between them. The tank with the M173 would follow centered and 100 meters behind the leading tanks. This tank should carry the tank platoon leader as well as an engineer to operate the demolition charge. In the meantime, direct and indirect suppressive and obscuration fires would be falling on and around the team's objectives as well as on the other pitas in the system.

When one of the lead mineroller tanks encounters the

edge of the opposing force's antitank minefield it should halt, a member of its crew should dismount to mark the edge of the field in an appropriate fashion, and the tank with the M173 should be brought forward to that tank's position. The engineer should then disconnect the M173 by activating a quick-release charge, and after the tanks have moved away, should fire the M173 from inside his tank.

The two mineroller tanks should move immediately into the breached area following a staggered path until they reach the antitank ditch. Even as the tanks work their way through the minefield, the team's engineers should move in behind them to mark the edges of the breach. After the engineers have reached the antitank ditch, they should take up positions from which they can give fire support to the infantrymen.

The leading infantrymen should follow closely on the heels of the engineers. Initially, one squad's vehicle as well as the platoon leader's vehicle should remain at the entrance to the breach to provide overwatching suppressive fires. Two squads should then be sent through the breach to cross the antitank ditch by using their scaling ladders. One squad should begin clearing a portion of the antitank ditch berm to the left of the entry point, the other the portion to the right to eliminate any enemy infantrymen who are defending forward of the strongpoint.

Once the berm has been cleared, the AVLB should be brought forward and its bridge emplaced so that the attached tank platoon can cross. The other infantry platoons should follow, while the CEV should begin to fill the ditch with soil from the berm.

At the pita proper, any wire obstacles that have not been destroyed by artillery must be breached by the leading infantry platoon to provide lanes for the personnel and, if possible, for the vehicles. Because the area between the close-in protective wire and the pita's berm is generally mined with antipersonnel mines, the last 20 to 25 meters must be traversed by the infantry mounted on M113s or tanks, or the minefields must be breached with bangalore torpedos.

Each of the two infantry platoons should create its own lane through the final obstacles if possible. They should attempt a mounted assault by driving through the wire and the antipersonnel minefield. Once they reach the pita's berm, the carriers should be parked with their front ends toward the berm, and the infantrymen should leave them by using the cargo hatch, then going over the deck and off the front slope to avoid the remaining mines.

The assaulting platoons should enter the pita at a single point. The point of entry into the pita should have, initially, a three-man element from each platoon armed with LAWs or Vipers and machineguns to provide suppression inside the pita and to destroy any armored targets.

The squads within each platoon — organized into three-man clearing and security teams — should then begin a systematic clearing of the pita's trenches, bypassing and securing bunker complexes until the mop-up

phase. Each of the clearing teams should be armed with grenades, rifles, and one M203 grenade launcher, with the soldiers rotating duties as they move along. Back-up clearing teams should follow the lead teams closely and should take over from them if they suffer casualties or run low on ammunition. All of the other elements of the company team should lend support with overwatching suppressive fires.

The clearing teams should be closely controlled so that they will not fire on each other, particularly as they begin to converge at the far side of the pita. It is important, too, that the other elements of the company team know where the clearing teams are so that they will not fire on them. One technique that can be used is to have the forward clearing teams carry distinctive pennants on poles to show their exact locations.

When the pita has been cleared, the overall commander of the operation — probably a battalion or brigade commander — must decide if the situation calls for a rapid exploitation by his armored forces or if more pitas have to be cleared by his infantry units. If possible, he should consider shifting to a lateral attack to roll up the flanks of the entire defensive area. Underlying his decision would be the absolute need for this force to maintain its initiative and momentum to keep the opposing force off balance.

This proposed method of assaulting a pita strongpoint fortification uses equipment now in the Army's inventory, including minerollers being issued to units in Europe. Task organizations and the actual conduct of the assault can easily be adapted to different situations in different environments using the same equipment.

One remaining task is to stimulate thought and discussion among professional soldiers regarding different techniques that might be used to conduct mounted assault breaching, especially in the desert. Such thought and discussion should lead to the development and publication of detailed information on these techniques.

And given adequate doctrine on the subject, the Army's mechanized infantry and armor forces should be able to conduct better and more realistic training. This, in turn, should enable these forces to handle strongpoint fortifications in the desert or anywhere else.



CAPTAIN WAYNE J. SABO is a tactics instructor at the U.S. Army Infantry School. A 1972 ROTC graduate of the University of Illinois, Chicago Circle, he has attended the Infantry Officer Basic and Advanced Courses and recently completed the Israeli Armored Corps Commander's Course. He has served in several assignments with the 2d Armored Division, including company executive officer, scout platoon leader, and battalion motor officer.



CAPTAIN EDWIN L. KENNEDY, Jr., is now assigned to the Doctrinal Literature Division of the Command, Tactics, and Doctrine Department of the Infantry School. A 1976 graduate of the U.S. Military Academy, he also has attended the Infantry Officer Basic and Advanced Courses and the Israeli course. He has served as an antitank platoon leader, an S-3 Air, and a mechanized infantry rifle company commander with the 1st Infantry Division.



crossing the Rhine

WILLIAM COLON

In early March 1945 almost any tactical situation map of the Western Front in Europe would have painted a rosy picture for the Allies. All along the Rhine River, German forces, weakened by their losses in the Battle of the Bulge and by the transfer of troops to meet the rising Russian threat on the Eastern Front, were withdrawing to the east bank of the Rhine, destroying bridges behind them.

On the Allied side, forces were strung out all along the west bank of the Rhine. The United States Ninth and Canadian First Armies had linked up near Wesel and Dusseldorf in the north, the First U.S. Army was approaching Remagen, the Third U.S. Army was heading for Frankfurt, and the Seventh U.S. and First French Armies were moving toward Stuttgart and Worms.

Through a German error the Ludendorff Bridge at Remagen was still intact when elements of the U.S. 9th Armored Division arrived and seized it before it could be blown. Its seizure was one of the biggest coups of the war, because it gave the Allied forces a highway across the Rhine. Not since 1804, when Napoleon's forces crossed the river to defeat the Austrians at Ulm, had an invading army crossed it.

But this was by no means to be the only crossing of the Rhine. Preparations were under way up and down the river for the establishment of other bridgeheads. In the end, the job of conducting the first assault crossing fell to the 5th Infantry Division. The Red Devils of the 5th Division got the job because they had the best record for river crossings in the Third Army, having conducted a total of 30, with five of them being assault crossings.

Elements of the division reached the Rhine in the vicinity of Oppenheim on 21 March and began deploying on the west bank. By the morning of 22 March the bulk of the division had arrived. All the division staff needed at this point was two or three days in which to plan a crossing. What it got was only a few hours, because the Germans were already diverting troops from the American bridgehead at Remagen to meet the new threat posed by the Third Army. Every hour's delay, therefore, reduced the chances for a successful crossing. No one knew this better than the Third Army commander, General George S. Patton, Jr. Patton also knew that the British 21st Army Group in the north was about to try an assault crossing of the Rhine. In deciding to rush the 5th Division's crossing, Patton may have been partly motivated by a desire to be first. In any event, on the morning of 22 March, he ordered the crossing to take place that night.

There were endless details to be worked out. Assault teams had to be assembled, armed, and equipped; boats had to be obtained and brought forward to the crossing site; artillery support had to be organized; guns of all calibers had to be brought up and emplaced; and troops, equipment, and supplies had to be scheduled for movement.

This is where the division's experience in river crossings paid off, because a miracle of planning took place in the few hours that were available. The final plan called for the initial crossing to be made by the 1st and 3d Battalions of the 11th Infantry. The 10th and 2d Infantry

Regiments would follow in that order, and these would be followed by the 90th Infantry and 6th Armored Divisions. The 4th Armored Division was prepared to strike behind the 5th's bridgehead.

Tremendous quantities of bridging and ferrying equipment were brought up by engineer units and special port battalion personnel. Supporting artillery units were massed in firing positions. The firing plan called for nearly 200 concentrations to cover the far shore from the water's edge to several hundred yards inland, concentrations on all roads and trails leading to the bridgehead area, and heavy concentrations on several towns in the surrounding areas. But none of these were to be fired except on call.

CROSSING

At precisely 2145 hours, Companies I and K of the 3d Battalion, which were to spearhead the crossing, moved down to the river bank. Before them the engineers had laid out the assault boats, and the assault teams carried the boats to the river, launched them, and climbed aboard. The night was cloudy as the troops began paddling across the 800 yards of water, fighting the current. Not a shot was fired from the far side. (See accompanying map.)

Company K's boats reached the far bank first, and as the first infantrymen scrambled ashore, a group of seven surprised Germans rose before them and promptly surrendered, even agreeing to row themselves unescorted across the river to captivity.

Company I was still crossing when heavy firing came from the right flank where the 1st Battalion's troops were crossing 700 yards downstream near Oppenheim. As the company's boats neared the east bank, its troops were also fired on, but the Germans were firing blindly, and the company suffered no casualties. But when Company L crossed minutes later, the German fire increased and several soldiers were hit.

Meanwhile, Companies A and B of the 1st Battalion were paddling into increasingly heavy machinegun and small arms fire in their sector. As their boats beached on the far shore and the troops scrambled ashore, German fire increased.

Company A met violent resistance in clearing out several buildings on its right flank. Twenty Germans were captured and 14 killed. By midnight, the entire 1st Battalion was across the Rhine, and the troops continued to clear pockets of resistance.

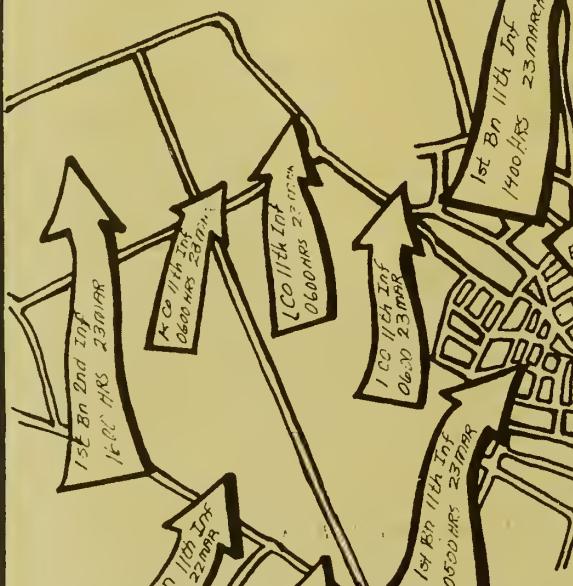
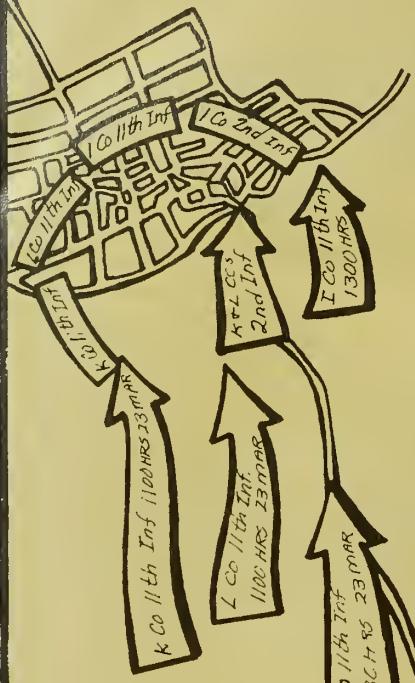
While the 1st Battalion was having trouble securing its sector of the bridgehead, the 3d Battalion tried to extend its sector about a thousand yards to the north. By midnight, too, the entire 3d Battalion had crossed over, with only Company L receiving heavy small arms fire during the crossing. Company K began clearing the left half of the 3d Battalion's river area while Company I moved south toward the 1st Battalion on its right flank. Company K sent two platoons north to secure the southern tip of a small airfield, which they did by 0400 hours.

Despite several small German counterattacks in the 3d

TREBUR

WALLERSTADEN

CROSSING of the RHINE
BY THE 5th INFANTRY DIV.



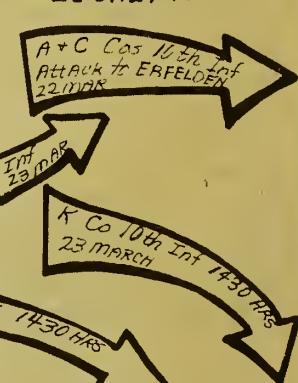
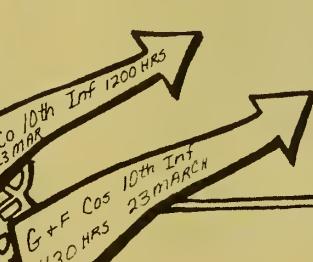
GEINSHEIM

NIERSTEIN

RHINE RIVER



LECHEIM



Battalion's sector, the 11th Combat Team began to take form as artillery liaison and forward observers crossed over. Troops of the 2d Battalion, who had been held in regimental reserve, began crossing shortly after midnight.

EXPLOITATION

At 0155, 23 March, the bridgehead was considered sufficiently secure, and the three battalions of the 10th Infantry began crossing near Oppenheim. Once across, they moved out immediately toward Leeheim on the southern flank of the bridgehead. Companies A and C of the 1st Battalion made contact at 0245 and moved eastward toward Erfeldon. Although Company C was fired on, the troops advanced with deadly marching fire, and soon most of the opposing Germans had been captured.

By 0655, the last battalion of the 10th Infantry was across, and as the two regiments fanned out in the bridgehead, U.S. Navy units brought up landing craft and put them in the river. Combat engineer battalions constructed four ferries and began building a treadway bridge. By 0700 hours, one ferry was working and the landing craft were scuttling back and forth across the river carrying supplies.

Meanwhile, with all but sporadic resistance broken in its sector, the 1st Battalion, 11th Infantry had continued moving inland toward Geinsheim, which was one of the division's primary objectives. It was still dark. The axis of advance was the main road leading to Geinsheim.

Heavy small arms fire flared as the assault companies advanced. Flares burst overhead, and these were followed almost immediately by heavy concentrations of German mortar fire. The shelling grew more intense as German artillery fire fell among the U.S. troops, forcing them off their course.

Caught in the open and unable to find cover or to advance in the face of the heavy German fire, the men in Companies A and B milled about and suffered a number of casualties. But they soon rallied behind their leaders and moved forward in a determined assault that scattered the resistance. Their advance proved timely, because moments later heavy concentrations of German shellfire fell in the area they had just left.

A little later, the German infantry counterattacked from Geinsheim. Company B caught most of the action, exchanging rifle fire, rifle grenades, hand grenades, and even bazooka fire with the Germans at close range. Supporting fires from the 19th Field Artillery Battalion helped the defense, and at 0400 the Germans broke off and withdrew.

Around 0530, the two companies resumed the attack on Geinsheim, following the retreating Germans who partially blew a canal bridge near the town while withdrawing. During this period, the German air force was active over the bridgehead. German planes dropped bombs along the river bank and attempted to strafe troops and installations, but were driven off by antiaircraft fire.

Company B's troops met intense resistance as they

neared Geinsheim. Small arms fire slowed their advance. Once again using marching fire, the Americans routed the German defenders along the canal, firing directly into their positions and sending them scurrying. As the Americans neared Geinsheim, they heard a welcome rumble. Supporting armor had crossed the Rhine and was rolling toward them.

At the same time, the 10th Infantry was expanding the bridgehead to the south, clearing several miles of the eastern bank and taking 73 prisoners while driving toward Erfeldon. The 2d Battalion pushed on toward Dornheim, which it cleared by 2030, and the 1st Battalion began passing through to attack Berhach.

Elsewhere in the 10th Infantry's area the 3d Battalion jumped off at 1300 in a southeasterly direction, and by 1630 Company L had cleared a pocket of resistance in the bend of the river formed by the Rhine's former and present courses. By this time, too, the 1st Battalion of the 2d Infantry had crossed the Rhine in landing craft piloted by the Navy, had passed through the bridgehead established by the 11th Infantry, and had continued the attack to the north, capturing the town of Astheim. Two hours later, its 3d Battalion had crossed and had moved toward Trebur to relieve the 3d Battalion of the 11th Infantry.

Thirty-six hours after the initial crossings, the division's bridgehead was five miles deep and seven miles wide and, in addition to the three regiments of the 5th Division, held two regiments of the 90th Infantry Division, a tank destroyer battalion, a tank battalion, and numerous artillery battalions. Elements of the 6th Armored Division were also across. The Rhine bridgehead was a success.

Casualties had been lighter than expected. Heroism had been commonplace. Crossing the Rhine without artillery preparation or area reconnaissance had been a calculated gamble that paid off, largely through the efforts of the infantrymen of the 5th Division.

The most prized accolade for the division came from General Patton when he wrote in November 1945:

Throughout the whole advance across France you spearheaded the attack of your corps. You crossed so many rivers that I am persuaded many of you have web feet, and I know all of you have dauntless spirit.

Despite its hasty preparations, the 5th Division's crossing of the Rhine River turned out to be one of the smoothest river crossings the division had ever conducted.



WILLIAM COLON has been interested in military history since World War II, when he served with the 5th Infantry Division. He participated in three of the 5th Division's six assault river crossings, was wounded twice and was awarded the Combat Infantryman's Badge. He retired from the Department of Defense in 1979 after 33 years of military and civil service.

TRAINING NOTES



The Counterattack

CAPTAIN CHARLES S. HAFFENDEN

Although our doctrinal literature is filled with material on the subject, the counterattack is one of the most neglected aspects of defensive planning at the small unit level. It is difficult to pin down the reason for this. Perhaps it is because small unit leaders are not trained to think of the counterattack as being a decisive part of defensive combat. Or perhaps they do not realize that a counterattack is really an attack by fire or by fire and maneuver conducted in the course of defensive combat to destroy enemy units, to relieve pressure on an engaged unit, or to regain terrain so the coherence of the defense can be restored.

Counterattacks fall into two broad categories — deliberate and local — depending on the echelon at which they are conducted.

A deliberate counterattack is normally assigned to the reserve force of a brigade or higher unit. This force, usually of task force size or larger, has the combat power to conduct deliberate counterattacks and also the planning and command and control assets to carry out its attack with a good chance of success.

A local counterattack, on the other hand, is performed by a unit that is

committed to the defense — but not in reserve — within an area of responsibility and under the command of a single commander. In other words, a local counterattack is the job of a defending battalion, company, or platoon.

A unit leader should not regard counterattack planning as something separate and distinct from his defense planning. It is, in fact, a continuation of his defense planning that seeks eventually to use an offensive action to put more teeth in his defense.

Counterattacks, by definition, are attacks that have clearly defined, limited, and realistic objectives, and they must be planned as early as possible so that they will be as effective as possible. In addition, early planning can reduce the risks to the counterattacking force; it can ensure that the objectives will be consistent with the overall defensive concept, and it can mean that opportunities to execute the counterstroke will not be missed. A final advantage of early counterattack planning is that the leader can use the same factors and deductions from his analysis of METT (mission, enemy, terrain, and troops available) that he used during his estimate of the situation for the

defense. For example, when comparing the possible courses of action to each other and to the enemy's most likely courses of action, the defending commander should try to answer the following questions:

- Do the objectives of the positions chosen for the counterattack force conform to the intent of the overall mission?
- Who is or will be available to conduct a counterattack? If there is no reserve available within the unit, who is most likely to be least committed to the fight and, therefore, best able to disengage and counterattack?
- What size enemy force can the available counterattack force take on successfully?
- How much time will it take for the counterattack force to move from its assigned location and engage the enemy once the order is given? What can the enemy do in that time?
- Knowing about how much time it will take for the counterattack force to move and engage, what is the latest possible moment at which the counterattack can be ordered and still have a good chance of succeeding?

The final counterattack plan should contain the same details as an attack plan. In brief, these include



objectives, direction of attack, line of departure, assault positions, fire support and coordination, subunit missions, service support, and command and signal.

TWO CONCEPTS

Also implied in the definition of a counterattack are two very basic concepts of maneuver: a counterattack by fire, and a counterattack by fire and maneuver. The intent of the defensive mission determines which one will be used.

In a defense that is designed to destroy an enemy force, counterattacks by fire are probably best. In this concept, units maneuver to more advantageous positions from which they can place fire on the enemy. In most situations, this will be the most common form of local counterattack. Although counterattacks by fire can be used to relieve pressure on an engaged unit, they are not intended to regain terrain.

If the objective is to regain decisive terrain, counterattacks by fire and maneuver should be used, because with these a unit can close with and destroy an enemy force.

Once a counterattack plan is prepared, it should be rehearsed both in daylight and in darkness. If a rehearsal is not possible, a complete leaders' reconnaissance should be made.

Among the most difficult decisions a unit commander may have to make during a battle is whether and when to order a counterattack. At battalion level and lower, the unit commander should base this decision primarily on his own personal knowledge of the battle and only secondarily on reports he receives from his subordinates. He must decide whether the momentum of an enemy's attack has been spent to the extent that a counterattack has a reasonable chance of succeeding. The best indications that an enemy force has reached the limit of its advance are when it begins hasty defensive preparations and when there are

no follow-on enemy units in the area. The defending commander must also try to get as much intelligence as he can about the locations and expected arrival times of enemy reinforcements so that he will know how much time his counterattacking force will have to complete its mission before those enemy units reach the field.

A decisive element in the defense, therefore, is the advanced planning for offensive local counterattacks to exploit enemy weaknesses and vulnerabilities when they occur. This is what will enable a defending unit to seize the initiative, go over to the offensive, and defeat the enemy.

CAPTAIN CHARLES S. HAFFENDEN is a 1976 ROTC graduate of Vanderbilt University and has completed the Infantry Officer Advanced Course. He has served as a rifle platoon leader, heavy mortar platoon leader, and battalion S1 with the 8th Infantry Division and is now a company commander in the 197th Infantry Brigade.

Spot Reports

CAPTAIN RAYMOND W. LEVESQUE

Various sophisticated intelligence-gathering systems are finding their way onto the modern electronic battlefield. But these systems are of little direct value to the battalion commander; he can only hope that the information they generate will be passed down to him when he asks for it. Unfortunately, though, in a fast-moving battle such information will usually arrive too late to be of much use to him in his tactical decision-making.

Today's commander must rely, essentially, on spot reports from the same intelligence-gathering sources his predecessor in World War II had — his front line troops and attachments, his scout platoon, and his fire support officer (FSO) — with some help, perhaps, from some attached ground surveillance radars (GSR) from the division's Combat Electronic Warfare Intelligence (CEWI) battalion.

The most important of these sources to the battalion commander (or the commander at any level), and the most often overlooked, is the front line soldiers. They, better than anyone else, can supply the commander with accurate and timely information on the location and activity of the enemy in all kinds of weather.

These soldiers must be trained to provide accurate, continuous spot reports to the chain of command on

their contact, or lack of contact, with enemy forces during the course of their assigned mission.

Many units teach soldiers the SALUTE format as a basis for sending spot reports — size, activity, location, uniform, time, and equip-



ment. Although this method is well suited for reminding a soldier of the information he should report after a patrol, it is not the best one to use in sending concise radio reports.

A more efficient format, which can be used to supplement SALUTE and to speed the processing of spot reports, is SEAL (size, equipment, activity, and location). A spot report

based on this format conveys the necessary information briefly and in the proper order — for example, "two T62s moving west, vicinity PK 347293." (Time is not included because at company level the time is immediate, and the battalion S2 can affix the time when he receives the report. The time is noted, though, when there is a delay between sighting and reporting the enemy.)

Activity is a very important but often overlooked part of the spot report. It cannot be assumed that if no activity is reported the enemy is doing nothing. To the company commander or the platoon leader, it may be obvious that the enemy tanks are stationary. But to a battalion commander, who may be in another company's sector, or to the S2 in the TOC it will not be. For these reasons, the disposition of the enemy tanks must be noted.

If activity of any kind goes unreported, the information, or lack of it, can easily be misinterpreted. If Company A reports three T62s moving at location X without giving their direction, and Company B reports three T62s at location Y, the S2 may plot two enemy platoons on his map where only one exists.

Above all, spot reports must be sent immediately. When dealing with actions at battalion level, the commander must know immediately what is to his front.

The other important sources of intelligence for a battalion commander are his scout platoon and his FSO. The scout platoon is especially important in an armor battalion where there are no attached infantry units. The platoon is responsible for locating the enemy and for forwarding reports, and it is the only unit in the battalion whose primary function is to gather information.

The battalion FSO is always available to the battalion staff, and he can provide a wealth of information to the S2. Although a company commander may forget to send a spot

report, he will invariably call for fire when he sees the enemy.

The FSO will become even more important as TACFIRE gets to the units. With TACFIRE, the S2 can step into the FSO's M577 and get an accurate printout showing the locations and types of targets that have been fired upon. Such information is invaluable because it shows trends in enemy movement and may fill the gaps in skimpy spot reports.

If the individual soldiers in the front lines are trained to use their eyes and ears properly and to send accurate, complete, and timely spot

reports, this vital information will be available to those who need it.

A commander is not likely to lose a battle because of too much information, but he may lose it because of too little.

CAPTAIN RAYMOND W. LEVESQUE recently completed an assignment as editor of *Military Intelligence* magazine and is now attending the Defense Language Institute in preparation for an assignment in Panama. He is a 1978 ROTC graduate of the University of Arizona and has attended the Tactical Intelligence Officer Course and the Tactical Surveillance Officer Course.

CAMMS

LIEUTENANT COLONEL WILLIAM L. HOWARD

The Computer Assisted Map Maneuver Simulation (CAMMS) system has proved to be one of the best methods of training battalion and brigade staffs in the Army, especially those in the Reserve Components.

The Army has used map maneuvers in training for some time, but before the advent of computers the work had to be done manually, which took a lot of people and a lot of time. Controllers and reactors were needed to feed canned messages to the unit that was playing; then they had to wait around while the unit went through its staff actions, planned some course of action, and issued its orders. The reactors who represented subordinate units would then respond, usually from a playbook. In some of the high level and more sophisticated map maneuvers, more people had to be employed to derive relative combat

power figures and to roll dice to determine a random number and the outcome of the battle. Often some of these people were eliminated to save money, and then realism was lost.

The introduction of the computer, with its ability to perform complex mathematical operations at high speeds and to store and retrieve data, has reduced the number of people and the amount of time needed to conduct a map maneuver and, at the same time, has increased realism. Usually, a main computer is tied into the training area by telephone lines and remote terminals. The computer has several programs, including some that do mathematical calculations and others that simply update a data base.

The CAMMS system is most effective when used in a multi-battalion exercise. Such an exercise requires a

large room to serve as a control and main battle area, separate rooms for each group of company commanders, and a room for each battalion staff.

In the main control area a large scale map is set up, and unit markers are placed on it to represent enemy and friendly forces. These markers all have a computer code that identifies the type of unit, its organization, and its equipment. These units are moved by table controllers who also serve as platoon leaders. Connected with their company commanders by telephone lines, they report the condition on the map board. The company commanders, in turn, are linked to their battalions by radio, while the battalions are linked to their brigade headquarters, which is usually controlling the exercise, by telephone. The brigade headquarters is best situated next to the map so that the



Given the computer hook-up, CAMMS can be played on any large-scale map.

staff can compare what is actually happening on the ground with what is being reported. In this way the brigade can determine problem areas in its subordinate units.

Once the system has been set up and the player personnel are in position, the map maneuver begins. It is usually determined in advance whether the battalions will be attacking or defending. A brigade level order is issued and the battalion staffs perform their functions.

As the staffs and commanders complete their estimates and issue orders, subordinate units move their unit markers on the control boards. Enemy units also begin their movement in accordance with published OPFOR doctrine. As the leading elements close with each other, the table controllers decide when they are in range of each other and begin the conflict by entering the unit computer codes and other pertinent factors, including terrain and weather, into the computer. The computer program moves the information through a series of mathematical equations and determines the outcome of the conflict. Casualties are assessed and situation reports are generated and given back to the table controllers. In

addition to giving spot reports to player units, the computer can call up an administration and logistics data base for both sides and subtract losses from that base. Unless the unit S1s and S4s take action to replace the losses, their units will very quickly run out of ammunition, fuel, people, and equipment.

Realism is most apparent at the battalion level where most of the work done by the staff is based either on reports from the field or on orders from above. But the computer does not make any decisions for the commander, nor does it do the work of the staff officer. It simply eliminates the requirement for a large number of people who might be considered little more than clerks and mathematicians.

The major disadvantage of the manual map maneuver lay in the fact that when the writing staff got tired and stopped writing messages the exercise usually came to an abrupt end. Besides, there was no way that a writing staff could accurately forecast a unit's reaction to any given event.

With CAMMS, these problems have been solved, because the exercise is self-sustaining. Once the units are given the initial order, it is up to them

to plan and to move. As friendly and enemy units come in contact and fight, the computer generates the messages, the staffs respond, and the situation can be influenced in many ways. These variations make the exercise more flexible since there is no approved solution, only what is actually happening on the board.

The main benefit CAMMS offers to Reserve Component units is an opportunity for their commanders and staff officers to conduct realistic combat operations within the confines of their armories, to see the results of their planning, and to work closely together. It has also increased the units' awareness of the capabilities and limitations of Soviet weapons and equipment as well as their own.



LIEUTENANT COLONEL WILLIAM L. HOWARD is a 1964 ROTC graduate of the Citadel and has completed the Command and General Staff College. He has served as a Technical Intelligence Team leader in Vietnam and in numerous assignments with the 100th Division (USAR).

ENLISTED CAREER NOTES



PERSONNEL CHANGES

Several key positions within the Infantry/Armor Branch have changed hands recently. First, LTC Richard C. Pahland has replaced LTC Tommy F. Grier, Jr., as Branch Chief. In addition, MSG Tyrone D. Haigh has taken MSG Jerry L. Rock's job as Senior Infantry Career Advisor; SFC Robert J. Hayes, Jr. and SFC William Crabill have replaced SFC Roger L. Miller and SFC William A. Riggins as Professional Development NCOs; and SSG(P) Gregory V. White has taken SFC Michael Engle's place as ANCOC Manager.

CHECKING OMPFs

It is not necessary for a soldier to review his Official Military Personnel File (OMPF) every time he gets an EER or a letter of appreciation, or even every year, for that matter. Although virtually thousands of OMPF transactions are made each year, there may be little change in the average file. But a soldier should review his OMPF when he becomes aware that his records are to appear before a Department of the Army selection board (at least 120 days before the board is scheduled to convene) or whenever there has been a material change to his records, such as one directed by the Army Board for the Correction of Military Records or the Department of the Army Suitability Evaluation Board.

Any soldier who wants to review his OMPF should write to Commander, U.S. Army Enlisted Records and Evaluation Center, ATTN: PCRE-RF-I, Fort Benjamin Harrison, IN 46249. Only written requests, complete with name, social security account number, and the ad-

dress to which the microfiche copy is to be mailed, will be honored. There is no charge for this service.

DA FORM 2-1

Under the provisions of Paragraph 5-3, AR 640-2-1, Military Personnel Offices must prepare and forward to the Infantry/Armor Career Branch a complete copy of DA Form 2-1 for each Infantry soldier in the ranks of staff sergeant and platoon sergeant. This is done upon completion of the soldier's annual records review, which is accomplished during his birth month.

The current DA Form 2-1 is the primary tool assignment managers and career advisors use to make assignments that best meet a soldier's career needs and preferences and also the needs of the Army. It contains information on that soldier that exists nowhere else, such as, his

- Assignment history.
- Previous duty positions.
- Military and civilian schools attended.
- Current height and weight.
- Aptitude area test scores.
- Overseas tours completed.
- Assignment limitations.
- Location of dependents.
- Awards and decorations.
- Additional Skill Identifiers and Skill Qualification Identifiers.

Soldiers and MILPOs alike can help see that assignments are made on the basis of current information by forwarding their updated DA Forms 2-1 to MILPERCEN.

CORRESPONDENCE

The Infantry/Armor Branch receives a lot of correspondence every

day from MILPOs and individual soldiers. Much of this correspondence is addressed incorrectly or does not provide enough information.

Each piece of correspondence should include at least the soldier's Social Security number, his complete name, and his five-digit MOS code.

The correct address of Infantry/Armor Branch is:

DA, MILPERCEN
ATTN: DAPC-EPK-I
2461 Eisenhower Avenue
Alexandria, VA 22331

ENLISTED PREFERENCE STATEMENT

Each soldier must submit an Enlisted Preference Statement (DA Form 2635) to his career branch within 30 days after his promotion to staff sergeant. AR 614-200, which requires this submission, also provides for the voluntary submission of a statement at any time following promotion to staff sergeant when an item of information on the previous form changes.

This form contains information on the soldier that is not available on other forms in his file, such as:

- His preference on duty position (troops, staff, instructor, ROTC, ARMR, Full Time Manning, first sergeant).
- The service schools he would like to attend (Drill Sergeant, Recruiter, First Sergeants Course).
- His unique assignment considerations (Joint domicile, sole parent, special dependent care requirements).
- The number and ages of his dependents.
- His typing ability.
- Remarks concerning specific assignments he wants and is qualified for.

Even though preferences are the primary subject of conversation between soldiers and their career managers, the preference statements now in their Career Management Individual Files (CMIF) range in age from one to nine years.

It is important, therefore, for each soldier to influence his own assignment process by making sure a current DA Form 2635 is on file with his branch. Every item of information on the form helps his assignment manager and career advisors to provide him with one of his first three

choices of assignment, and it does so before the assignment process begins rather than after, which is very important. It helps, too, if one of an Infantryman's first three choices is a command with a large Infantry population where more soldiers in different ranks and with different Infantry MOSs are needed.

Each soldier should route his completed and signed preference statement through his PAC and MILPO so that his assignment preferences can be recorded on his DA Form 2 and on his Enlisted Master File as well. In

this way every assignment consideration related to him can be reviewed in conjunction with his DA Form 2-1 Personnel Qualification Record and OMPF microfiche. The result should be the best match of his preferences and the Army's needs.

Although files on soldiers in the first five pay grades are not maintained at MILPERCEN, their preferences are available through each Enlisted Master File, which is updated when the soldier screens and updates his DA Form 2.

RESERVE COMPONENT NOTES

More than 6,500 ROTC cadets are now taking part in the Simultaneous Membership Program (SMP), which means that they are also members of Army National Guard or Army Reserve units. But there still seems to be some confusion about the rules of this program.

Under the SMP, high school students may enlist as potential SMP participants in Guard or Reserve units and attend basic training during the summer. Enlisted soldiers who are already assigned to selected Reserve units may qualify for simultaneous membership if they have four or more years remaining on their enlistments. The SMP is also open to college students with or without prior military service.

SMP enlistees may be eligible for the ROTC Advanced Course as early as their freshman year in college. After enrolling in Advanced ROTC, the cadets receive drill pay from their Reserve Component units in the rank of sergeant (unless they have reached a higher grade) in addition to the \$100 monthly subsistence allowance they are entitled to as Advanced Course cadets.

When they have completed Advanced ROTC, these cadets can receive early commissions and serve as second lieutenants in their Guard or Reserve units while completing

their degrees. After graduation, they are slated for either Active or Reserve Component duty, depending upon the needs of the Army.

Some participants mistakenly believe they are guaranteed duty with selected Reserve units for the entire term of their military obligations. But, as Total Army assets, they are assigned accordingly, unless they have Guaranteed Reserve Forces Duty (GRFD) contracts.

Another relatively common but incorrect assumption about GRFD contracts is that they can be broken. Cadets who have these contracts are never involuntarily ordered to active duty, but they can volunteer for active services and thus void their contracts.

SMP members also report some confusion about how to credit their enlisted duty toward their overall length of service.

Once they have been commissioned, SMP participants cannot count as creditable service the enlisted duty in Reserve Component units they performed while they were Advanced Course cadets. But if they remain in an enlisted status (are not commissioned) after they complete the ROTC Advanced Course, that time is creditable. Of course, those who are commissioned get to count the time they spent in commissioned

status for pay purposes. Whether SMP members are commissioned or not, their enlisted duty before they entered the Advanced Course can be counted when computing length of service.

Reserve Component unit commanders also frequently have questions about the program, specifically, how to manage SMP cadets.

SMP participants should be treated as officer trainees and should be given duties normally required of second lieutenants, with individual training plans developed for each of them. While it is expected that they will also be exposed to the full range of duties performed by lower-ranking enlisted soldiers, the emphasis should be on their development as officers. Counseling and instruction in the leadership roles of officers is considered a major part of their training.

SMP members may attend both their unit's Annual Training and ROTC Advanced Camp during the same summer, but if the dates for the two conflict, the cadet must go to the Advanced Camp.

The intent of the program is to have SMP cadets commissioned early so they can serve as officers in Reserve Component Units while finishing their degrees. This means that it is especially important for their units to train them properly.

OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

As we travel around the world visiting Infantrymen, and as you visit us at Infantry Branch, we always seem to be working on ORBs, forms, and records. That will never change, because we will always be responsive to your needs, and you must be vitally concerned also.

The key people in this process are you, your commander, and your servicing Military Personnel Office. You should always review your Officer Record Brief (ORB) for accuracy. Don't wait for the annual audit to know what is printed on it. The other important record is your P-fiche (performance fiche). Your ORB and your "fiche" are the two documents that appear before promotion and selection boards. Do not wait until a week before your board convenes to tell your MILPO that there is some erroneous data in your records. It will be too late. Remember also that your "fiche" contains your official photograph, and you should make sure it is accurate and up to date.

The series of articles that follows may be helpful. First, there is a schedule of branch advanced courses. Commanders can help us identify outstanding Infantrymen to represent the Infantry community at the other branch schools by making an entry on their OERs, or by calling or writing Branch with a recommendation.

A second article discusses the preference statement, which many refer to as the "dream sheet." I can assure you, though, that each statement is reviewed upon receipt by your assignment officer, and your preferences are entered on the left-hand side of your paper CMIF. It is also used by your assignment/professional development officer in making

your Infantry assignments.

Those of you who have been selected for promotion by recent boards will be managed in your promotable grade, and it is time for you to let us know your goals and objectives, both short and long term, so we can work with you. You should keep abreast of such personnel developments as the regimental system, combat arms detail, promotion by specialty, and promotion by floors. In fact, these would make excellent topics for officer classes or commander's calls.

If you are involved in a PCS move to or from overseas assignments or to schools this summer, take the opportunity to stop by Branch and discuss with your assignment officer the major things you want us to consider as we begin the assignment process. We can also discuss what you should try to accomplish during your upcoming three-year tour. Finally, you should read our 1982 Infantry Branch Newsletter for professional development considerations.

COL JAMES A. SULLIVAN

KEEPING RECORDS

Each year as the promotion and selection boards prepare to convene, concerned officers rush to get their records in order. Invariably there is a great deal of confusion regarding what should be in these records and how it should get there. It is important, therefore, for each officer to understand his personnel records and what he needs to do to keep them up to date.

These records include:

- Field 201 File — Military Personnel Records Jacket (MPRJ). Maintained by the local MILPO and

used by the unit personnel office.

- Career Management Information File (CMIF). Maintained for personnel actions by Infantry Branch and used for assignment and professional development.

- Official Military Personnel File (OMPF). Maintained in MILPERCEN by the Records Services Branch, PERSINSD, and used by promotion and selection boards.

Two items found in both the CMIF and the OMPF — the officer record brief (ORB) and the microfiche — are critical to both assignment and promotion functions.

An officer's ORB includes several items that he should check periodically to be sure they are up to date: Civilian and military education levels, assignments, and physicals (height and weight).

An officer should go to his MILPO to review his ORB yearly during his birth month, and he should correct any discrepancies through the MILPO.

The other important item in the files, the microfiche, has two parts, a performance fiche and a service fiche, and sometimes a third one as well, called the restricted fiche, with the following contents and uses.

- The performance fiche contains an official photograph, evaluation reports, awards, decorations, letters of commendation, Article 15s, courts martial, letters of reprimand, course completion certificates, and college transcripts. It is used by selection boards, career managers, and the Army Board for Correction of Military Records (ABCMR), and for other personnel actions.

- The service fiche contains the accession package, promotion orders, extension of service agreements, RA appointments, and other data required for service computation. It is

used by career managers, by the ABCMR, and for service computation. It is not normally seen by selection boards.

The restricted fiche contains denied OER appeals, courts martial with no finding of guilty, wholly-set-aside courts martial or Article 15s, and ABCMR case documents. It is seen only by the individual concerned and the ABCMR. It is not released to selection boards or other agencies without special permission or a written request from the individual concerned.

The photograph in the performance fiche is especially important. A photograph is required within 60 days of promotion to first lieutenant and every four years thereafter (every three years for colonels). It should be noted that boots are not authorized for wear when the official photo is made (see AR 640-30 for details).

The OMPF also needs to be checked, and an officer need not make a special trip to MILPERCEN to do so. He can obtain a free copy of his microfiche and his most current ORB by writing: DA, MILPERCEN, ATTN: DAPC-POR-RS, 200 Stovall Street, Alexandria, VA 22332.

Officers are encouraged to visit their MILPOs and to submit changes through their personnel officers. Anyone who encounters difficulty in getting items on his record corrected should forward his request along with substantiation to Infantry Branch, and we will assist him.

Any officer who wants to visit MILPERCEN instead to review his records should call the Records Service Branch (AUTOVON 221-9618, Commercial 202/325-9618) 72 hours before his visit so that his official file will be available. No appointment is necessary for the visit itself.

TELEPHONE DIRECTORY

An internal reorganization of telephone lines occurred recently in Infantry Branch. To ensure that you reach the appropriate assignment section and to avoid unnecessary delays,

please use the following numbers when calling your assignment officer.

Branch Chief	AV221-0207/0208/7823
LTC SC11/Command	0209/0317/7823
LTC Other Specialty/ROTC	7823/0209
LTC SC 54	0317/0318/0207
CPT & MAJ SC 54	0317/0318
MAJ SC 11	0318/7823
MAJ Other Specialty	0317/7823
CPT O/S Advance Course	0207/0209
CPT Other Specialty	0207/0208
CPT CONUS Nominative	0207/0208/0209
LT SC11	0207/0209
LTS Accessions	0208/0209
Branch Representative	AV 835-3611/4381
Ft Benning	

Each assignment cell's telephone lines are on a rotary system. Therefore, if you get a busy signal, wait a few minutes and try again, because all lines to that cell are being used at that time.

OFFICER ADVANCED COURSES

The schedule for the combat arms officer advanced courses for Fiscal Year 1983 are listed here along with an address and point of contact for each course. Fifteen Infantry officers will attend each of the Armor Officer Advanced Course classes, six will attend each of the Field Artillery classes, and one will attend each of the Engineer classes. In addition to these, two Infantry officers normally attend the Marine Corps' Amphibious Warfare Course at Quantico, Virginia, which begins each year in August.

The selection of an officer to attend any of these courses is made on the basis of his potential for promotion and of the date he will be available for reassignment. An officer is eligible to attend an advanced course any time between his third and eighth years of active duty. He usually attends after his initial assignment and before he is assigned to command, but it is not unusual for an officer to have commanded before he attends the course.

Each officer should receive his request for orders (RFO) four to six months before his class begins. Enclosed with the RFO will be an advanced assignment packet, which is

vital in making the officer's next assignment. Each officer is notified of his next assignment by letter about two months before his advanced course begins.

Officers of branches other than Field Artillery must report for the Artillery course three weeks before the start dates shown so that they can attend an intensive course in gunnery techniques. The report date for each of the other courses is about four days before the class begins.

IOAC		
Class	Start Date	Completion Date
83-1	31 Oct 82	24 May 83
83-2	23 Jan 83	28 Jul 83
83-3	10 Apr 83	13 Oct 83
83-4	5 Jun 83	12 Dec 83
83-5	7 Aug 83	28 Feb 84

U.S. Army Infantry School
Fort Benning, GA 31905
AV: 835-3611/7359 (CPT Mick Bednarek)

AOAC		
Class	Start Date	Completion Date
83-1	7 Oct 82	3 May 83
83-2	11 Jan 83	15 Jul 83
83-3	12 Apr 83	14 Oct 83
83-4	26 Jul 83	17 Feb 84

U.S. Army Armor School
Fort Knox, KY 40121
AV: 464-6329/5045 (CPT Joe Tombrello)

FAOAC		
Class	Start Date	Completion Date
83-1	11 Oct 82	5 May 83
83-2	24 Jan 83	28 Jul 83
83-3	17 Apr 83	20 Oct 83
83-4	14 Jul 83	9 Feb 84

U.S. Army Field Artillery School
Fort Sill, OK 73503
AV: 639-2951 (CPT Danny Walling)

EOAC		
Class	Start Date	Completion Date
83-1	18 Oct 82	10 May 83
83-2	22 Nov 82	14 Jun 83
83-3	24 Jan 83	28 Jul 83
83-4	14 Mar 83	15 Sep 83
83-5	23 May 83	30 Nov 83
83-6	27 Jun 83	19 Jan 84
83-7	8 Aug 83	1 Mar 84

U.S. Army Engineer School
Fort Belvoir, VA 22060
AV: 354-2184/1048 (LT Christine Lee)

OFFICER PREFERENCE STATEMENT

An officer's preference statement is his most important link with his assignment officer, and he reduces his chances of going where he wants to go if he fails to get a current preference statement in his file.

A current and detailed preference statement tells the assignment officer immediately what the officer wants to do (professional and personal considerations), what position he now holds, how to get in touch with him (home and duty telephone), and something about his family (personal data). It is hard to believe that any officer would want his assignment officer to make a decision without this information.

The reverse side of the preference statement explains how to fill out the form, but here are a few additional tips:

Under the section entitled "Macom/Activity/Location," an officer should list as many locations as he prefers. He should not limit his selection to three locations just because three spaces are provided on the form. This is particularly important if his first three choices are Forts Carson, Lewis, and Ord. This is not to say he shouldn't request these locations, but he should understand that most infantry majors also request them and that he needs to give the assignment officer more flexibility in making his assignment.

Under the section entitled "Duty Assignment," Army priority assignment choices (ARR, ROTC, USMA, and DA Staff) should be included. By not indicating any preference with respect to these assignments an officer may be avoiding reality. If it is his turn for an Army priority assignment and he has failed to state a preference, he may be assigned to one without regard to his desires.

Career aspirations should be listed under the section called "Professional Development Comments." For example, if a major is interested in battalion command, he should request assignments that will improve his

chances and include any comments that he feels are pertinent to managing his career.

Under "Personal Considerations," any personal problems he may have should be listed; for example, if an officer has a legitimate personal hardship, he should request a compassionate assignment in accordance with AR 614-100, or apply for assignment consideration under the Handicapped Dependents Program.

As a general rule, an officer who wants an overseas tour should see that his preference statement reaches MILPERCEN nine months before the desired report date and, for a CONUS assignment, six months before the report date.

Otherwise, the suggested times for submitting the statement are:

- When the Personnel Qualification Record (DA Form 2-1) is initially prepared.
- About 9 to 12 months before completion of an overseas tour or a stabilized tour within CONUS.
- About one year after reporting to a CONUS station on a non-stabilized tour.
- Within 60 days before beginning a course of instruction at a CONUS PCS service school, a civilian institution, or training with industry.
- Nine months before completion of an initial utilization tour and at any time thereafter when preferences change for a commissioned officer who has received his graduate degree through a full-time Army program that requires a utilization tour.

Officers who have obtained their degrees from other sources (on their own or before commissioning) are also invited to indicate such preferences. After studying DA Pamphlet 600-3 (Officer Professional Development and Utilization), the officer should specify in Item 12 of the Officers Assignment Preference Statement where re-utilization tours are desired. This statement will include the type of assignment he prefers (for example, laboratory assistant, procurement, R and D staff officer) and, if he knows them, the agencies or headquarters to which he wants to be

assigned periodically throughout his remaining years of service.

Each officer should keep a copy of his most recent preference statement to make sure he can recall what the last preferences he forwarded to MILPERCEN were.

Infantry officers should forward their preference statements to HQDA, DAPC-OPE-I, Alexandria, VA 22332.

LAW SCHOOL CANDIDATES

The Office of the Judge Advocate General (OTJAG) is now accepting applications for the funded legal education program. Under the program the Army may send up to 25 Active Duty commissioned officers to law school at Government expense. The officers selected will remain on active duty while attending law school.

Officers who are interested should review AR 351-22 (The Judge Advocate General Funded Legal Education Program) to determine their eligibility. The program is open to officers in the ranks of second lieutenant to captain with at least two but not more than six years of service at the time the legal training is scheduled to begin.

Anyone who is interested and eligible should immediately register for the June or October offering of the Law School Admission Test (LSAT) and follow the application procedures in the governing regulations. Completed applications must be sent through command channels to arrive at OTJAG not later than 1 November.

CAPTAINS TO EUROPE AND PANAMA

The Army National Guard (ARNG) Captains to Europe Program, which offers extended active duty tours in Europe to ARNG captains, was recently expanded to include tours in Panama as well.

The program gives ARNG captains

valuable training experience with the Active Army and also an opportunity to support the Active Army with their knowledge and expertise. In addition, the Guard will benefit from the experience these captains bring back to their states.

Qualified applicants are selected on a "first come, first served" basis. There are now 122 ARNG captains from 36 different states on tour in Europe, but there are still positions to be filled. European tours vary from 20 to 30 months in length and will not be extended. This policy gives more personnel the opportunity to participate.

To be eligible for a tour in Europe, a captain must have less than four years in grade, at least one year of ARNG unit experience before applying, and qualification in one of the following specialties: 11-15, 25, 48,

49, 52, 53, 71-74, 91, 95, or 97. If possible, he also should have completed the advanced course and have a baccalaureate degree.

The selected captains will be assigned to brigades, battalions, or companies and will perform duties commensurate with their grade and specialties.

There are now seven available tours in Panama, four in Special Forces and three for foreign area officers (Latin American), varying from 24 to 30 months in length.

Those who are selected for tours in Panama must be qualified in one of these two specialty areas and must have less than four years in the grade of captain. They must also have had at least two years of ARNG unit experience immediately preceding the submission of the application.

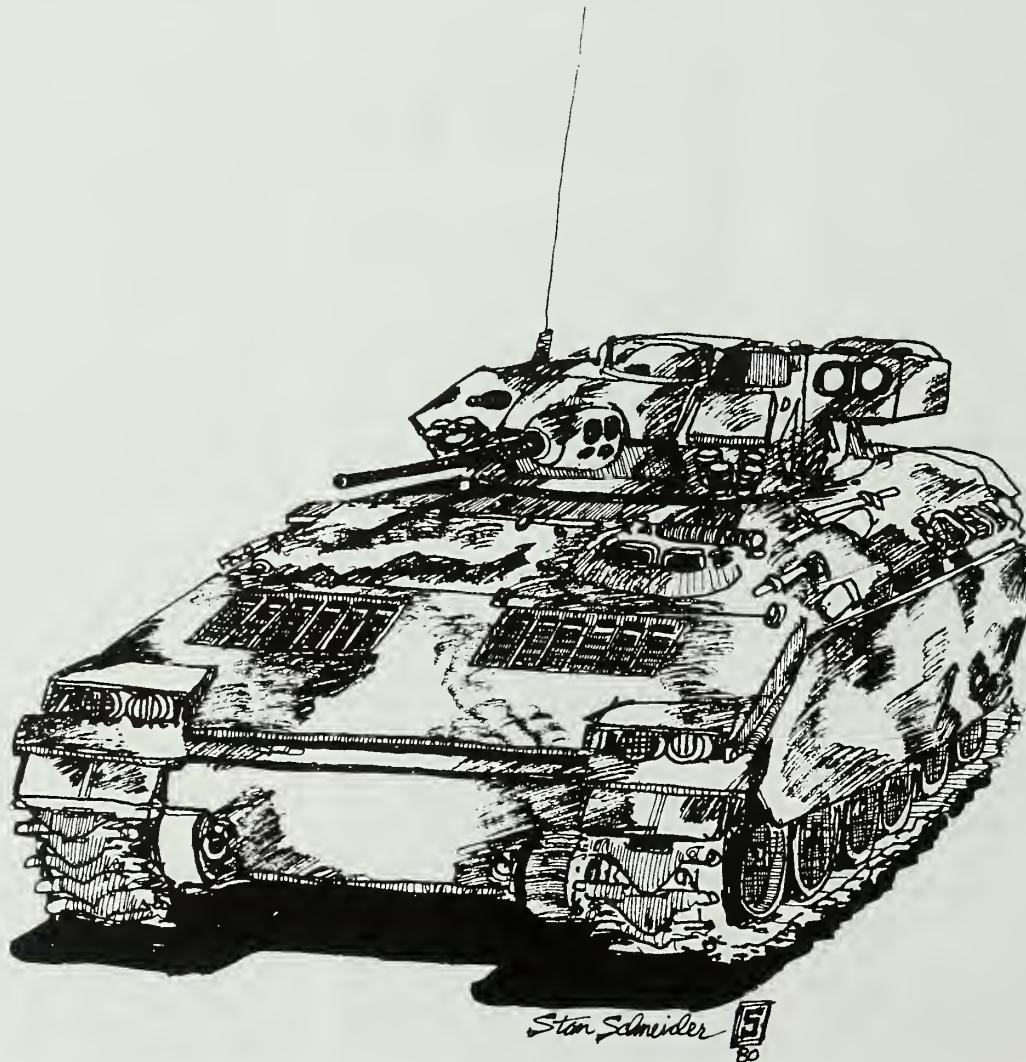
First lieutenants who are eligible

for promotion to captain before their entry on active duty may also apply for tours in either location.

Since none of these tours will be extended, the National Guard Bureau will continue to accept applications even after the positions now vacant are filled. The program is a continuing one and will be offered to as many Guard personnel as possible.

CLARIFICATION ON CGSC

The item in INFANTRY's March-April 1982 issue on a change of policy concerning CAS³ and CGSC equivalency for Reserve officers was premature. Action on the announced change to AR 135-155 has been postponed and may not be implemented before 1984.



BOOK REVIEWS



The Battery Press of Nashville, Tennessee, is planning to reprint our two Vietnam era books — INFANTRY IN VIETNAM and A DISTANT CHALLENGE. We published the first of these in 1967, the second in 1971. The Press expects to bring out INFANTRY IN VIETNAM this September and A DISTANT CHALLENGE early in 1983. We will let you know more of the details in our coming issues.

We continue to receive many fine books. Here are several we recommend highly:

• **ROYAL UNITED SERVICES INSTITUTE AND BRASSEY'S DEFENCE YEARBOOK, 1982** (Pergamon Press, 1982. 379 Pages. \$25.00, Paperbound). This exceptional handbook on military affairs, in its 92d year of publication, contains a number of articles of particular interest to today's infantryman. The two by Ian V. Hogg should be read. One of these is on weapon developments, the other on infantry support and fighting vehicles.

Hogg doubts that the selection of 5.56mm as the NATO standard caliber is a good thing. He feels this decision was nothing more than answering "the siren call of technological wizardry which seems to have more appeal than cold tactical sense." He also believes that "present-day attitudes seem to favor seizing on a novel weapon and bending the Army's tactics to suit, rather than deciding what the tactics are to be and then bending the technology to fit the perceived task."

Hogg expresses an equally strong view about the current generation of infantry fighting vehicles. The last paragraph in his piece on vehicles is worth quoting:

"Looking around the world's

APC/MICV scene at the moment, one thing seems to be apparent, and that is the paralysis in infantry thinking which has been brought on by the advent of mechanization. Unless and until the infantry makes the basic decisions on what size the infantry squad is to be, how they are to be used in conjunction with armor and what their tactical role is to be, then there is no hope of producing a satisfactory vehicle to carry them in their chosen role. Every MICV so far seen (in the West at any rate) seems to exhibit far too many elements of compromise. If only somebody, somewhere, would bang on his desk and say '*This* is how my infantry will operate, *this* is how they will be armed and *this* is how they will be transported ...', then we might get an answer. It might not necessarily be quite the right answer, but it will be a good deal more right than some of the suggestions presently being touted."

• **HOW TO MAKE WAR: A COMPREHENSIVE GUIDE TO MODERN WARFARE**, by James F. Dunnigan (Morrow, 1982. 442 Pages. \$14.50). This book represents a light-hearted and simplistic approach to war, to the people who fight wars, and to the results one can expect from them. Well known for his work in historical simulations, the author uses his facile pen to paint war as some sort of huge game, played by the not-so-bright for the most obscure reasons. Would you like to be a general? You can, the author believes, if you read his book. Would that the real world could be handled so easily!

• **THE EISENHOWER DIARIES**, edited and introduced by Robert H. Ferrell (Norton, 1981. 445 Pages. \$19.95). Off and on from 1935 to ear-

ly 1967 the late President and former supreme Allied commander in Europe during World War II kept a personal diary. Many of the entries are intensely personal, others are factual accounts of particular happenings. Together, the entries give us another view of the man sometimes regarded as simple-minded and shallow in his thinking. They show Dwight Eisenhower to have been ambitious, shrewd, intelligent, and moral. The editor, a professor of history at Indiana University, has added introductory sections where needed and a host of explanatory notes.

• **THE HISTORY OF AMERICAN WARS FROM 1745 TO 1918**, by T. Harry Williams (Knopf, 1981. 439 Pages. \$20.00). T. Harry Williams, who died in 1979 before he could complete his planned volume on all of America's wars, was a great classroom instructor at Louisiana State University from 1941 until his retirement just months before he died. This book, which would have been only a portion of the one that was planned, rings with his classroom presence — sharp-tongued, quick-witted, imposing (even though he, himself, was a slight man). What Williams does here amply fulfills much of his stated objective: to write "an account of our wars from the colonial period to Vietnam, comprehensive enough to give a well-rounded picture, it is hoped, and yet succinct enough to fit into a single volume." This is a good, modern introduction to our early wars, and could certainly serve as a textbook for an introductory military history course.

• **SECRETARIES OF WAR AND SECRETARIES OF THE ARMY: PORTRAITS AND BIOGRAPHI-**

CAL SKETCHES, by William Gardner Bell (Center of Military History, United States Army, 1982. 176 Pages. \$12.00). Although this book has had a long gestation period, it has been worth the wait. This is the first time any book has ever cataloged all of the Army's secretaries and recorded their contributions. It also traces the development of the particular office from the Revolutionary era to the present, and gives the location of the Army's headquarters from Fraunces Tavern in New York City to the Pentagon. Each of the one-page personality sketches is accompanied by either a full-color portrait or photograph and an accompanying note on the artist or photographer. The author is a former editor of *ARMOR* magazine, a man of excellent taste, and a member of the Army's military history office for some 25 years. He is now preparing a similar volume on the Army's military leaders.

• **MODERN AMERICAN ARMOR: COMBAT VEHICLES OF THE UNITED STATES ARMY TODAY**, by Steven J. Zaloga and James W. Loop (Stackpole Books, 1982. 88 Pages.). This is an excellent reference book, one that includes not only numerous photographs but detailed line drawings of the main types of vehicles as well. One of the book's strong points is its use of solid historical data to trace the development of many of the Army's present day vehicles, and the authors' willingness to go back in time to discuss such earlier vehicles as the M26 Pershing, the M75 and M59 armored personnel carriers, and the M67 mechanized flame thrower.

• **MONTY: THE MAKING OF A GENERAL (1887-1942)**, by Nigel Hamilton (McGraw-Hill, 1981. 864 Pages. \$22.95). The dust jacket proclaims this book to be the definitive study of Bernard Law Montgomery's early life and military career through the battle of Alamein. Unfortunately, it is not definitive, but it is definitely detailed. The main subject never comes into clear focus, because the author never lets us really see the man

about whom he is writing. In fact, he spends so much time "white-washing" Montgomery's warts that he ends up doing Montgomery a great disservice. Montgomery was one of England's great wartime battlefield commanders; he was also an outstanding trainer of troops, perhaps the best that England has ever developed. He knew the British soldier better than most of his contemporaries did and he gave those soldiers the kind of leadership they wanted and needed. But he was an extremely controversial military man, and it is doubtful that he deserves all of the accolades Hamilton heaps on him. The subject deserved better at the hands of the author, and one can only hope that Hamilton's future volumes on Montgomery will be better done.

Now, here are some of our longer reviews:

THE PAPERS OF GEORGE CATLETT MARSHALL: "THE SOLDIERLY SPIRIT," DECEMBER 1880 - JUNE 1939. Edited by Larry L. Bland (The Johns Hopkins University Press, 1981. 742 Pages. \$30.00). Reviewed by Major David R. Kiernan, University of South Carolina.

This is the first of an intended six volumes that will include not only George C. Marshall's personal and official letters but also extracts from his speeches, statements, and tapes.

Marshall was truly a "man of letters," and the editor and his associates have succeeded in capturing the elusive spirit of this very complex citizen-soldier. This first volume, in fact, provides an insight into the character of an unusually great American who, as a professional soldier, could design bellicose contingencies and, with equal ability, insure a magnanimous peace.

General Marshall kept no diary. Therefore, the reader must appreciate the editor's challenge in attempting to

select those items that are most representative and accurate. The editors have provided a refreshing respite from the usual "kill and tell" genre of recent military memoirs. The reader is rewarded by their efforts.

INSIDE THE SAS. By Tony Geraghty (The Battery Press, 1981. 249 Pages. \$17.95). Reviewed by Captain F.R. Thomas, 8th Canadian Hussars.

"Who Dares Wins" is the motto of Britain's Special Air Service (SAS). Its World War II exploits such as the destruction of almost 400 German aircraft in the Western Desert made the motto a particularly apt choice. It would appear from the SAS solution to the Iranian embassy hostage-taking incident of 1980 in London that these words still have relevance for today's troopers.

In his book, Tony Geraghty covers the activities of this elite British unit from 1950 to 1980. SAS activities during these years have not always been widely publicized for a number of reasons, many of which the author makes clear. The book illustrates that the effectiveness of intervention forces does not necessarily depend on either their size or their firepower.

Of particular interest to INFANTRY readers with Ranger or Special Forces experience should be Geraghty's chapter called "How to Select an Elite." The SAS seeks soldiers with initiative, self-discipline, independence of mind, ability to work without supervision, stamina, patience, and a sense of humor. Because SAS members work in teams of four under conditions of intimacy, the overriding criterion for selection is whether an SAS instructor could "live with" the individual under observation.

Geraghty does not conclude his book in the usual sense of the word, because he feels that the SAS "is dynamic" and that its history is not ended. He predicts that the SAS story will continue to unfold as in the past largely out of the public eye. His book cannot help but interest those

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We will furnish a publisher's address on request.

who are involved with the rapid deployment force that is now being created by the United States military establishment.

**APPOMATTOX COMMANDER:
THE STORY OF GENERAL E.O.C.
ORD.** By Bernarr Cresap (A.S. Barnes, 1981. 418 Pages. \$15.00). Reviewed by Benjamin F. Gilbert, Professor of History, San Jose State University.

Although the author is a descendant of General Ord, he has been objective in this study of an important but overlooked American soldier. Those who know about Ord are usually familiar only with his California career and his role in the Civil War. This entertaining biography covers virtually all aspects of Ord's career.

Ord was born in Cumberland, Maryland, in 1818. He received his military training at West Point between 1835 and 1839. Shortly after his graduation, Ord was assigned to the Third Artillery, which was then serving in Florida. He soon found himself fighting the Seminole Indians in the Everglades. Ord took part in several dangerous expeditions and won a reputation for enduring hardships.

In 1842, he was sent to Fort Macon in Beaufort, North Carolina, which he found to be dull duty — he always preferred action. In 1844 he was assigned to an artillery unit at Fort McHenry, and when the Mexican War broke out his unit was ordered to California. To Ord's chagrin, the fighting in California was over by the time his unit landed and he settled down to a routine existence at Monterey.

During the 1850s he fought in the Indian wars in Oregon and the Washington Territory. Despite his Southern birth and his pro-slavery sympathies, Ord remained loyal to the Union during the Civil War.

Early in the war he was promoted from captain to general and eventually rose to command an army and a military department. He was considered aggressive, fearless, and

skillful in managing troops. Ord was one of the best assault leaders in the Union Army, and he aptly demonstrated this proficiency during the closing days of the war at Appomattox.

With the coming of peace, Ord was made responsible for occupying the former Confederate capital, Richmond. He maintained a policy of leniency and won the respect of the Virginians. Later, he became the military governor of Arkansas and Mississippi and in 1868 was put in command of the Department of California.

Prior to his retirement from the Army in 1880, Ord commanded the Department of Texas, where he left a legacy of peace along the Mexican border. During the last few years of his life, he represented U.S. railroad and oil interests in Mexico.

The book has extensive footnotes, an extensive bibliography, four Matthew Brady photographs of Ord, and eleven maps that illustrate the Civil War battles in which Ord participated. It should appeal to readers who are interested in the Civil War and to those who like to read good biographies as well.

**UNITED STATES-SOVIET
RELATIONS IN THE ERA OF
DETENTE.** By Richard Pipes (Westview Press, 1981. 227 Pages). Reviewed by Captain Don Rightmyer, USAF Directorate of Soviet Affairs.

Dr. Richard Pipes was formerly a professor of history at Harvard University and director of the Russian Research Center there from 1968 to 1973. Today he serves as chief expert on Soviet affairs for President Reagan's National Security Council.

The author's best known, and perhaps most controversial, article — "Why The Soviet Union Thinks It Could Fight and Win A Nuclear War," published in 1977 — is included in this collection of his writings. It also includes seven other essays written by Pipes over a period of years.

The essays chiefly illustrate the

theme of detente and how it is viewed and pursued by the leaders of the Soviet Union. This isn't an isolated look at semantics, because Pipes lays the foundation for understanding Soviet policy by examining Russian and Soviet history, foreign policy, ideology, and global strategy.

The essays are well-written and certainly thought-provoking. Many may disagree with the author's conclusions about the motivation and perceptions behind Soviet actions, but readers should consider them and arrive at their own decisions about the USSR today.

**HANNIBAL: THE GENERAL
FROM ROME.** By Ernle Bradford (McGraw-Hill, 1981. 223 Pages. \$14.95). Reviewed by Leroy Thompson, Festus, Missouri.

Unlike many ancient military historians whose training in the classics makes it difficult for them to write in English without sounding ponderous, Ernle Bradford combines sound scholarship with enjoyable prose in this book. Too many writers, when dealing with Hannibal, get wrapped up in his tactics at Cannae or Lake Trasimene while ignoring his great strategic and diplomatic skills, but Bradford treats all aspects of Hannibal's genius. He also avoids the pitfalls of marvelling at the crossing of the Alps while ignoring Hannibal's far more impressive accomplishment of keeping what was basically a mercenary army supplied and cohesive while campaigning constantly for 15 years in enemy territory.

Although Bradford's analyses of Cannae, Lake Trasimene, Trebia, Zama, and other battles are very good, his work is at its best when he covers the grand strategy of the Punic Wars and tries to discover what made Hannibal such a great general.

Interestingly enough, Bradford finds many parallels between the lives and skills of Hannibal and Scipio, who was to prove the Carthaginian's nemesis. If one has time for only one work on the Punic Wars, then this is a good choice.

ROMMEL: BATTLES AND CAMPAIGNS. By Kenneth Macksey (Mayflower Books, 1979. 224 Pages. \$14.95). Reviewed by Alexander S. Birkos, Mount Shasta, California.

Ever since the 1950s there has been a steady stream of books and films about Erwin Rommel, who by now has attained near demi-god status as a World War II military leader. But his worshippers will not like what Kenneth Macksey has to say about their hero in this frank reappraisal of the man and the general.

The author, a specialist in armored warfare, traces Rommel's career, leadership, and abilities as a commander from World War I to the time of his death in 1944. Rommel comes in for some rough treatment at Macksey's hands.

To Macksey, Rommel was often lucky and too often took credit for work done by his subordinate commanders and staff officers. Macksey believes that Rommel's rough treatment of his junior officers, his open contempt for the Italians, his poor handling of the North African campaign, and his unnecessarily poor relations with Field Marshal Kesselring were the real reasons why he was relieved of his command in 1943, not his poor health.

Although Rommel was sometimes lucky and sometimes a bold tactician, more frequently he was rash in his handling of his troops and fortunate in avoiding being captured. He fared badly when he met a competent opponent such as Auchinleck but looked good when he faced an incompetent such as Richie. His personal traits left much to be desired, and he was not above finding scapegoats to cover his own mistakes. One of Macksey's strongest suggestions is that Rommel should never have been advanced beyond corps command.

For anyone who has been long exposed to the Rommel myth, this book is heady stuff. Military historians and professional officers alike will find Macksey's analyses of Rommel's battles incisive and lucid. This book certainly belongs on the shelf of anyone who has an interest in the history of

World War II and in military leadership.

SEA POWER AND STRATEGY IN THE INDIAN OCEAN. By Alvin J. Cottrell and Associates (Sage Publications, 1981. 148 Pages). Reviewed by Dr. Joe P. Dunn, Converse College.

The three essays in this slim volume, another product of the prestigious Georgetown University Center for Strategic and International Studies address the necessity of improving American power projection in the Indian Ocean and the Persian Gulf.

Professor Godfrey Kemp begins with a historical survey and a philosophical discussion of the role of seapower before outlining the dangers of the Soviet challenge to traditional American access to the Gulf area. Robert Hanks and Alvin Cottrell focus on the Straits of Hormuz chokepoint in their detailed depiction of the potential instability and the political-military threats in the area.

Finally, Moorer and Cottrell discuss United States naval requirements for stemming the erosion of area stability and the protection of regional lines of communication. They call for an expansion of the U.S. facilities in Diego Garcia, Kenya, Somalia, and Oman, and for political and military support for Pakistan and Saudi Arabia.

Although the book reiterates familiar themes and breaks no new ground, it is interesting, timely, and worthwhile. Laymen will find it useful.

THE EVOLUTION OF WEAPONS AND WARFARE. By Trevor N. Dupuy (Bobbs-Merrill, 1980. 350 Pages). Reviewed by Lieutenant Colonel R.J. Rinaldo, Armed Forces Staff College.

This book is a one-volume distillation of a wealth of knowledge about war by the author of scores of books on the subject and the co-author of

The Encyclopedia of Military History.

The author's knowledge, as presented here, lends perspective to the way war has evolved over the centuries. With that perspective, the reader gains fresh appreciation for the complex task of integrating weapons, organizations, and tactics to obtain victory over an opponent.

Dupuy explains why these parts of the military equation have not always added up well. And the generals are not always at fault. Governments, for example, sometimes retrench from military spending following a conflict and this leads to a decline in warring developments. At other times the interactions of personalities, peoples, armies, and weapons result in almost unbeatable fighting systems such as Genghis Khan's hordes or Adolf Hitler's Nazi war machine.

The book is not limited to the highlights of military history or to the famous and infamous captains of war. It takes us from primitive times through the nuclear era and covers nearly every important personality and military and social innovation that has had an effect on the conduct of war.

The overall result is useful to the military professional, and the latter parts of the book particularly so. In his last five chapters, Dupuy lays out his reasoned opinions about lethality through the ages, tactics, military history and theory, the timeless verities of combat, the principles of war, and the importance of new ideas in warfare as opposed to new things.

A close reading of its contents should provide much historical background and an analysis for understanding today's defense problems as well as some paths toward solutions.

RECENT AND RECOMMENDED

THE 1st SS PANZER DIVISION IN THE BATTLE OF THE BULGE. By Steven Kane. International Graphics Corporation, 1982. 36 Pages. \$3.50.

TOY ARMIES. By Peter Johnson. Doubleday, 1982. 144 Pages. \$22.50.

INFANTRY LETTERS

49

Letters



IDEAS IN PRACTICE

Dear Sir,

Your January-February 1982 issue of INFANTRY was, as usual, excellent — two articles, especially.

In "A Bilateral Staff" (page 11), Major Walter Mather outlines an organization which, if not formally recognized by the Army, is at least informally practiced by a large number of combat and combat support battalions in the field.

The idea of using the XO as the Deputy Commander for Logistics and the S3 as the Deputy Commander for Operations verifies the importance of these two areas of concern for any operation. The supervision of these functions becomes even more critical in the support battalions where trains areas are prevalent and where support to forward units is likely to be extended over very large areas. Especially when the unit operates with a TOC and a jump TOC, which is normally well forward in the area of the engaged units while the trains are nearer the support area, no one person can coordinate and supervise both areas, and the need for the bilateral staff is clear.

In another article in that issue Captain Walter Shrepel discussed the battalion officer school (page 34). In my last unit the rule of the day was to train, educate, and evaluate the junior officers, and to my way of thinking there can be no better system than one that involves all of the senses in the program — the brain, the hands, the ears, the eyes. In fact, this type of school is not restricted to military units; it can also be used to help train young executives for business firms.

There may come a time when we will see officer SQT or promotion tests. Until that time, the least we can

do is to make sure junior officers have all the advantages we can offer by training and preparing them for higher levels of responsibility. Let's make the battalion officer school mandatory for everyone. General Meyer, where are you?

Thank you for a great magazine.

JOHN D. SPENGLER
MAJ, Field Artillery
Terre Haute, Indiana

TRAINING'S THE ANSWER

Dear Sir,

I have carefully studied the article "MC-1 Parachute," by Lieutenant C.T. Payne (INFANTRY, November-December 1981, page 9), and the letter in response to it from Captain C.M. Leavelle (March-April 1982, page 49), and I would like to join the argument.

First, my qualifications to argue. I am a senior qualified parachutist with many years in jump status, including participation in eight mass tactical jumps with the MC1-1, with four of those as jumpmaster. As a qualified instructor for this parachute, I helped qualify Company C, 1st Battalion, 504th Infantry (Airborne) as the first company-sized unit to fully qualify with the MC1-1.

Not once during any jump on which I was jumpmaster, using either the T-10 or the MC1-1, did anyone get hurt or experience a midair collision. Why? Training!

First, my unit underwent extensive and repetitive training quarterly on the basics of parachuting, including equipment preparation, packing, and rigging, in-aircraft procedures, exits, canopy control, and parachute landing falls. Also included was an extremely detailed jumpmaster briefing

covering each type of aircraft and canopy that could be used on an airborne operation.

Second, my unit tried to ensure that each mission jumpmaster briefing was again extremely detailed but tailored to the specific mission. This again helped train the jumper.

All my experience was before the testing and full introduction of the MC1-1B canopy with the anti-inversion net, and before the past and present programs to more rigidly control exit interval and jumper staggering. Therefore, I ask Lieutenant Payne and others to review their basic airborne refresher training. We as leaders owe it to the airborne soldier to be as well trained for the air mission as for the ground mission. These better trained soldiers will have fewer mishaps.

WALTER D. CROLEY
CPT, Infantry
San Juan, Puerto Rico

BAYONET TRAINING

Dear Sir,

Reference the news item on bayonet training in your January-February 1982 issue (page 3), in the picture the soldier appears to be executing a jab. I don't know how they teach it now in training, but the magazine well and pistol grip on the rifle are turned down.

When I was a bayonet instructor on Parris Island, we taught Marines during recruit training to turn the magazine well and pistol grip to the right. This way the flat edge of the blade would be inserted between the ribs of an enemy and up through the heart.

As an infantryman, I think that there is too little emphasis on bayonet

training. I am not an expert on the subject, but I am proficient in the five killing blows, blocks, and parries the Marine Corps teaches its recruits, and this tip might help.

ROBERT S. GERARD
S/SGT, USMC
Camp Pendleton, California

ARNG MOS TRAINING

Dear Sir,

I take exception to Major Clifford Baker's letter in the March-April 1982 issue of INFANTRY (page 51) concerning Army National Guard MOS training.

MOS qualification in our unit is handled differently and in a far more meaningful manner than in the one he describes. (Bear in mind that Adjutants General control the Guard units far more than ARNG regulations do.)

In our unit, on-the-job experience or on-the-job training (OJE/OJT) is not used for MOS qualification; only supervised on-the-job training is allowed. In some cases, per regulations, some correspondence course training (also supervised) and formal schools are also required.

Our program is based on the Battalion Training Management System, as well as on the training SOPs from brigade, battalion, and our own company. Critical task lists for MOS qualification are submitted by platoon and section leaders and approved by the company commander. This is not an administrative burden for the commander, but rather the centerpiece of his individual training program.

Furthermore, we specifically set aside time and qualified personnel to conduct MOS qualification during drill weekends, and we purposely integrate the critical tasks required for MOS qualification into all collective field training. The entire chain of command, from commander to first-line supervisor, gets involved in this effort.

By assigning tasks as "homework"

and then using the BTMS pre-test and post-test method of instruction during drill weekends, we can cover many more subjects to the prescribed standards in much less time. Finally, quality assurance tests (QAs) are conducted by the commander, the full-time training staff, and the platoon and squad leaders to ensure proficiency. At that point the MOS is awarded and MOS sustainment takes over.

Trainers Guides are used to develop critical task lists for MOS qualification, along with job books, the realities of unit equipment, and available training areas and unit experience.

Our system seems to be working well, although additional guidance from the battalion level on minimum required tasks is expected. The key to a working program, however, is direct involvement by the chain of command.

MICHAEL D. ORTON
SFC, Oregon ARNG
Medford, Oregon

SQUAD TRAINING

Dear Sir,

I read the article "Individual Training," by Captain Warren Wilson, in your March-April 1982 issue (page 36) and was disappointed by the generalization concerning the way squad leaders use their training time.

The author states that he found, in his unit, that squad leaders used the lack of training time as an excuse for their own inadequacies. He then went on to tell how he had taken the opportunity to implement a program of training his soldiers in individual training.

As an infantryman, my concern is not with the program but with the method that was used to correct the problem. True, some leaders may use lack of time as an excuse, but this is generally not the case. Why is it difficult to schedule formal training for the basics that build the strength for the unit? If a battalion commander

controlled the hourly breakdown of the training schedule and told his company commanders to train their companies during delays on the firing range, during time left over after short training days, and during pauses in the action on FTXs, could they be expected to accomplish the task? Company commanders expect to be given adequate time and resources to train their units. We as squad leaders expect the same to train the individual soldier. Why does it stop at our level? Individuals die in combat, not companies. We want development and supervision, not criticism.

If a deficiency does occur in individual training throughout the company, it is most likely a problem with the entire company's training chain. It means the platoon sergeant has failed to train, supervise, and counsel the squad leaders; that the first sergeant has failed to do the same with the platoon sergeants; and that the officers have failed to implement and supervise the total training program. We must return the responsibilities and the trust to these positions instead of ignoring them with programs that dodge the problems in the supervisory levels. If a poor leader is allowed to remain in the training chain, his subordinates will not be developed properly, and his unit will be trained poorly.

The formal training schedule must include time to train leaders, individual soldiers, and units. Only then will the FTXs be worthwhile training experiences. The system is designed to work with each member of the training chain having his own span of control. If a member of the chain cannot handle the responsibilities that his position calls for, let's try to develop him. If this fails, let's indicate it on his evaluation report and find someone who can handle it.

DAVID R. LITTLEJOHN
SSG, USA
Brigham Young University
Provo, Utah

FAITH IN M16

Dear Sir,

After reading Mister Embry's letter on the M16 rifle (*INFANTRY*, March-April 1982, page 52), I must speak my piece. No need to beat about the bush — I think it is one of the best military rifles in the world today, if not the best.

To begin with, let us clear up the argument that the M16 breaks easily and jams readily. Far from breaking easily, the M16 is as durable as any other military rifle. In its almost 20 years of service the M16 has never experienced any type of breakage problem. Even the problems of Vietnam were not the result of breakage. As for jamming, that problem was corrected more than 12 years ago, and it was not a problem inherent in the weapon. Documentation can be obtained from Senate subcommittee reports on the M16 and reference can be made to many sources, notably Smith's *Small Arms of the World* 1977.

Mister Embry's contention that the AR180 and the Ruger Mini 14 are superior to the M16 really raised my eyebrows. The Ruger, a favorite of American "civilian commandos," has been tested by several countries and found suitable only for police

work. The AR180 was tested and found to be unreliable, both in functioning and in parts breakage.

For 16 years now I have been a serious student of twentieth century military history and a collector and shooter of military small arms. My faith in the M16 comes from extensive research, comparison, and personal experience. For the past ten years I have served as an infantryman in Ranger, Airborne, and straight leg infantry units, and the M16 has proved to me to be a deadly, reliable rifle. I would want no other weapon for combat.

I will gladly take on all comers on the subject.

SSG SCOTT COOPER
Kensington, Connecticut

JUNE, NOT JULY

Dear Sir,

In his review of *Die Schlacht um Moskau*, by Janusz Piekalkiewicz (*INFANTRY*, March-April 1982, page 47), Wolfgang Gerhardt states that Hitler attacked the Soviet Union in July 1941. In fact, *Unternehmen Barbarossa* began on 22 June 1941. By 1 July German forces had taken Minsk, Lvov, Brest-Litovsk, and

Riga (Latvia) from the Russians.

My grandfather was a Flak battery commander in the Luftwaffe and has told me of the tension and action of the Russian invasion in June 1941.

ERHARD F. KONERDING
Wesleyan University
Middletown, Connecticut

EDITOR'S NOTE: Mister Konderding is right, of course. We knew better.

LOCK, STOCK, ETCETERA

Dear Sir,

On the continuing M16 controversy, the fact that a defense such as Mister Osborne's (*INFANTRY*, September-October 1981, page 22) seems necessary should be a warning sign. And if its reputation is underserved, why are all the modifications being made, which are to give us the M16A2? These modifications include a burst-fire lock to replace the fully automatic operation; an unbreakable nylon stock and grip; a heavier barrel with a shorter twist and muzzle brake; and new sights.

That's quite a package. In fact it amounts to the replacement of the entire rifle — lock, stock, barrel, and sights. Even the cartridge is to be replaced by the NATO SS109.

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



Whether we admit it or not, we are, in fact, now in the process of replacing the present M16 with a new rifle, but the only candidate being considered is the M16 itself. This is absurd when there are many other good rifles that deserve consideration — the 5.56mm rifle that Fabrique Nationale produces, for example, as a companion piece to the light machinegun we've adopted.

The FN rifle would give U.S. forces a common design of weapons at platoon level; it would open up the possibility of common infantry weapons among NATO countries; and it would relieve us of the burden of writing articles to convince the troops, against settled tradition and their own better judgment, that the M16 is really an excellent infantry rifle.

If we can afford to rework the M16 from buttplate to muzzle brake, we can afford to look at something else.

WILLIAM BEFORT
Moscow, Idaho

SHUFFLING AUTHORS

Dear Sir,
In the article "One-on-One Train-

ing" in your May-June 1982 issue (page 30), the name of David L. Hannaman should have been listed first in the byline, because he was the primary author of the article as well as the one who originally conceived and developed the training techniques discussed.

While this might seem like a minor point, it does clarify things and give appropriate credit to Mister Hannaman.

JOYCE ARDALE
Army Research Institute
Alexandria, Virginia

EDITOR'S NOTE: We mistakenly converted the authors' names to alphabetical order in the byline and further erred in scrambling the biographical data at the end of the article. Thanks to ARI for straightening us out.

FIXED BAYONETS

Dear Sir,

It is hard to take your magazine seriously as a professional journal when you publish articles as poorly researched and illogical as the one on bayonet training by Mister Garzone

(*INFANTRY*, March-April 1982, page 34).

The author shows a definite lack of scholarship when he says that "During World War I ... an infantry assault with fixed bayonets was the only way ground could be gained." This implies that no ground was gained without the bayonet. Bayonet or no bayonet, no ground was being gained except through extreme carnage. Machineguns and artillery were the problem; that's why we have tanks today instead of high technology bayonets.

I also like the thought that the primary goal of bayonet training is to teach aggressiveness. I would suppose that the real objective is to teach soldiers to kill people with it.

That the Infantry Training Brigades can devote nine precious hours pandering to the myth of the bayonet is extraordinary, because soldiers are still not trained very well to use the thing it is attached to — the rifle — to hit targets out to 460 meters. This distance, ironically, is also the length of the new bayonet assault course.

CHARLES L. TALLMAN
CPT, Infantry
Newport News, Virginia

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From The Editor

WE NEED EACH OTHER

More than 480 commissioned and noncommissioned officers, both Active Army and Reserve Component, responded to our 1982 reader survey (sent to some of the infantry companies on our free distribution list) and we appreciate it. Assuming they are a representative sample, we trust that they speak for the rest of you at company level.

We were happy to note that more than half of you read "most of each issue," that more than half use INFANTRY in preparing reports of training materials either "frequently" or "sometimes," and that almost all rate the writing style of the articles "generally clear and easy to understand." These are all major goals of the staff — to see that the magazine is readable, so that it will be read and then used as it is intended to be used.

Most of you also either "leave it in the dayroom," "keep it for unit reference," or "pass it on." That's good, too, because the idea is to give as many of you as possible a chance to see and use each issue.

To get you to use the magazine, though, we know that we must give you the information you think is most useful. The specific subjects the respondents would like to see covered more often in INFANTRY are the following:

- Tactics (60%).
- Weapons and equipment (50%).
- Training techniques (50%).
- Leadership and command (45%).
- Combat developments (42%).

A substantial percentage also would like to see more on military history, maintenance and logistics, and intelligence and electronic warfare.

But you are more than the readers and users of the magazine; many of you are also the writers. So, if you have had some special training or experience in one of the subjects mentioned, please let us hear from you. Although we do have to be selective about the articles we accept because of the limited number of pages we have, your manuscript will receive careful editorial consideration, and what you have to say may help another infantryman in another unit.

To those who request that we publish INFANTRY more often so that we can print more articles, we must say that's not possible right now. (With the budget cuts we're all getting, we're happy to have what we have.) But we are taking some steps to make up for the eight pages we lost recently by making the best possible use of the ones we have left. We can't make the magazine solid type, though, or we'd lose you all, so we try to make it attractive at the same time by including some art work.

Finally, in every survey we have ever conducted, at least one of you has offered a suggestion as to what we should put on the back cover, and we were not disappointed this time. But, for now at least, PLAYBOY will have no competition from INFANTRY.

REBIRTH

*We fled to our bunkers
As the whistle of mortars flew down.
Our small arms carved up the dark
In futile search.*

*Three times the night bled fire.
In between
We crouched in the earth,
Tensed, edgy,
Waiting. Until dawn
When it stopped.*

*The sun never looked
So friendly
As it did
Washing away the shadows
That day.*

(By Charles Lotter)

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OCTOBER 1982

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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

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Editor

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Deputy Editor

Albert N. Garland

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Mary H. Wolstenholm

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M. Lena Biskup

Contributing Artists

Mary Ann Norton

Charles Willis

Jeanette Heller



September - October 1982

Volume 72, Number 5

ARTICLES

- 17 CHAIN TRAINING: REVISITING AN OLD IDEA
Major General John R. Galvin
- 19 THE FUTURE OF THE INFANTRY
Office of Infantry Force Management, USAIS
- 22 COMMAND IN EUROPE
Captain Robert L. Maginnis
- 27 THE COMMANDER-ATTORNEY RELATIONSHIP
Major Danford F. Carroll
Captain Rita R. Carroll
- 31 SELECTING LEADERS
George G. Eddy

FORUM AND FEATURES

- 6 THE DIFFERENCE
Dandridge M. Malone
- 7 ARMY AVIATION: AN INSIDER'S VIEW
Captain Kevin G. Scherrer
- 9 ATTACK HELICOPTERS
Lieutenant Ronald M. Buffkin
- 11 CACC SYSTEM
Captain Stephen Orloff
- 12 COMMUNICATING IN BATTLE
Captain Gregory J. Premo
- 14 URBAN SNIPERS
Major Wayne A. Silkett
- 15 ARCTIC AIRBORNE MORTARS
Staff Sergeant John E. Foley

TRAINING NOTES

- 34 MORTARS IN MOUNTAINS
Major Thomas H. Whitley
Captain Charles T.D. Gendron
- 36 WHAT COMES FIRST?
Captain Kenneth A. Siegel
- 38 FDC SKILLS
Charles Harvey

DEPARTMENTS

- 2 COMMANDANT'S NOTE
- 3 INFANTRY NEWS
- 40 ENLISTED CAREER NOTES
- 41 OFFICERS CAREER NOTES
- 44 BOOK REVIEWS
- 48 LETTERS

FRONT COVER

The United States Infantryman will be around for a long time doing what he has always done — fighting or standing ready to fight on the ground, for the ground.

USAIS

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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

PHYSICAL FITNESS — A LIFESTYLE

There has always been a well-known maxim in our Army: The Army is not a job; it is a way of life. And so it is with the Army's new physical fitness program. No longer does that program consist of a few repetitions of the "daily dozen" or a warm-up run. It has truly become a way of life, a lifestyle, if you will. One thing you can be certain of — physical fitness in the Army is here to stay!

In the past the various physical fitness programs the Army used never really convinced its soldiers to stay in shape, even though individual physical readiness was recognized as being the prime ingredient of success in battle. Now, though, the newly organized Army Physical Fitness Research Institute at Carlisle Barracks and the U.S. Army Soldier Support Center at Fort Benjamin Harrison have been charged with developing individual and unit programs, a core of qualified physical fitness trainers, a comprehensive nutrition program, weight control and health standards, and human behavior research programs that, collectively, will help insure a well-rounded, physically fit soldier and, if called upon, success in battle.

We at the Infantry School fully support this increased emphasis on physical fitness. In fact, the School long has had a vital interest in this subject because no other branch places the same physical demands on its members as does the Infantry. The Infantry School, therefore, insists that its resident course students commit themselves personally and professionally to the highest standards of physical fitness, and further insists that its graduates must be capable of immediately assuming leadership positions in even the most physically demanding infantry jobs.

All of the School's resident courses have specific physical fitness prerequisites. Thus, officer candidates and officers selected to attend the basic officer course must meet the standards established by the Army Physical Readiness Test (APRT) before they arrive at Fort Benning. Officers selected to attend the officer advanced course should arrive in good physical condition, because they will have to meet APRT standards before they graduate.

Enlisted men selected for either a primary, basic, or advanced noncommissioned officer course must have passed the APRT during the six-month period immediately preceding their reporting dates.

The Airborne and Ranger courses have higher physical fitness

standards than the other courses because their students must perform more and more varied and strenuous physical activity in a shorter period of time. Airborne students are tested during the first day of training in APRT events and are required to complete at least 45 pushups, 45 situps, and run 2 miles in 15:59 or less. In addition, Airborne students must be able to complete a minimum of 6 pullups and successfully finish the 2- to 5-mile runs that are conducted throughout the three weeks of training.

Ranger students, prior to their arrival at Fort Benning, should be certified by their unit commanders as having passed the APRT and a combat water survival swim test of 15 meters. During their first day of training, students are tested in APRT events and are required to meet the same standards as Airborne students, including doing 6 pullups. They are also given another combat water survival swim test. During the course, students must successfully complete 2- to 5-mile runs.

Officer candidate, basic, and advanced officer course students are tested against the APRT at least once during their courses, and they must pass the test before they can graduate. Advanced noncommissioned officer course students are also tested at least once and they, too, must pass the test.

Primary and basic noncommissioned officer course students do not take the APRT at Benning because of the length of their courses, but physical conditioning forms a definite part of their schooling.

We recognize that there are competing forces and priorities that must be made compatible with the overriding need for every Infantryman to be "fit to fight." But we must never put more faith in machines than we do in the soldiers who operate them. For war, after all, is a struggle in which the mind and the body must work in the utmost harmony. Accordingly, the physical aspects of soldiers must be as carefully nurtured as the technical ones of machines, if not moreso.

Physical fitness means physical readiness, and physical readiness is an important part of unit readiness. Without it, our Infantry units will not be able to carry out their primary mission — to go to war if called on, and to win that war, no matter when or where.

Practice combined arms!

INFANTRY NEWS



THE FOLLOWING NEWS ITEMS were furnished by the Directorate of Combat Developments, USAIS:

• **Army 86 Family of Studies.** Division 86, the study of the armored and mechanized divisions, has been completed for all intents and purposes. Much work remains to be done in transition planning. Infantry Division 86, the study of the infantry division, is in a hold status at the moment pending the results of the 9th Infantry Division's efforts to develop a high technology light division. The studies relating to Air Assault Division 86 and to Airborne Division 86 are still in progress.

• **General-Purpose Athletic Shoe.** The Infantry Board recently completed a test of the general-purpose athletic shoe. The Board used five commercially produced athletic shoes during its test. Three categories of test soldiers were used: 232 trainees undergoing one station unit training, 80 soldiers (40 men and 40 women) who did two hours of athletic activity daily for 50 test days, and 507 volunteers who wore the test shoes when they undertook athletic activities.

Foreign matter tended to build up on all the shoes, and there was little variation in traction from one shoe to another. No one pair of shoes was preferred over the others.

The purpose of the test was to determine whether an individual soldier could be given an all-purpose athletic shoe that he could wear while participating in physical training activities. The test results will be used by the Infantry School to recommend the selection of a candidate shoe for further consideration.

• **Combat Boot.** The Army is still seeking a better combat boot. Accordingly, the Army, together with the Marine Corps, has proposed turn-

ing to the commercial market place (domestic and foreign) to select boots that can be tested by both services. Screening and testing will begin once the candidate boots have been procured. The point of contact at DCD is Major Cummins, AUTOVON 835-7514, or commercial 404/545-7514.

THE DIRECTOR OF THE Weapons, Gunnery and Maintenance Department (WGMD) of the Infantry School has been designated the School's single point of contact concerning the Improved TOW Vehicle (ITV) and the New Equipment Training Team (NETT) concept of training for the ITV.

As such, the Director of WGMD will respond to all requests for ITV mobile training teams, provide training under the ITV NETT concept, update training manuals for both the ITV and the TOW, and develop new training manuals for field use.

WGMD's telephone numbers are AUTOVON 835-2417/2315, or commercial 404/545-2417/2315.

THE NATIONAL INFANTRY MUSEUM has recently completed its Presidential Collection. It now has important signed documents by each of the 40 Presidents of the United States, as well as pictures and other interesting memorabilia. The Museum has also published a brochure on the military service of the Presidents, which it gives to its visitors.

Seven Presidents have visited Fort Benning, and photographs that were made during their visits are on display. Also on display are the breeches worn during World War I by then Captain Harry S. Truman.

Another interesting piece is the duffel bag that was carried during the War with Mexico by then General Franklin Pierce, who became our 14th President.

There are many other items of interest in the Presidential Collection and throughout the National Infantry Museum, and everyone is invited to visit it. There is no admission charge. The Museum is open from 1000 to 1630 Tuesday through Friday, and 1230 to 1630 on Saturday and Sunday. It is closed on Monday, and on Thanksgiving, Christmas, and New Year's Day.

The National Infantry Museum Society, formed at Fort Benning a number of years ago to assist the Museum with financial and volunteer support, is open to anyone who is interested in joining. The cost is \$2.00 for a one-year membership, or \$10.00 for a lifetime membership.

Additional information about the Museum and the Society is available from the Curator, National Infantry Museum, Fort Benning, Georgia 31905, AUTOVON 835-2958, or commercial 404/545-2958.

A RECENT ADDITION TO FORT BRAGG's training areas is a Military Operations on Urbanized Terrain (MOUT) complex. It has been built by civilian contractors to train units up to battalion level in combat techniques in a city. The complex has 44 buildings, including a designated church and a town hall. It also has a sewer system that will actually be used for drainage and that can be used by soldiers as underground tunnels. The complex is the largest and most detailed of its kind in the military services.

In conjunction with the MOUT complex, a close combat course has

also been constructed. It is designed to teach the individual skills soldiers need in urban operations.

The MOUT complex will also be used for command post exercises, mass casualty exercises, riot control training, and fire fighting training.

THE INFANTRY SCHOOL's Weapons, Gunnery and Maintenance Department's Mortar Division has produced a pamphlet called "Mortar Tips, Tactics, and Training." It is being issued to mortarmen throughout the Army through the School's Extension Training Management and Support Division.

WGMD's point of contact for this pamphlet is Captain James Hood, AUTOVON 784-4308, or commercial 404/544-4308.

A TURBINE POWERED INDIVIDUAL lift device designed to take off vertically and enable a man to fly for 30 minutes at speeds up to 60 miles per hour has been successfully flown in a series of free flights by military personnel. It is known as the WASP II.



The WASP II is being considered as a candidate individual lift device by the Army, and the Infantry Board

is conducting a concept evaluation program to determine the mobility of military personnel in the field.

The device has no wings or exposed rotors, and its small turbofan engine produces thrust in the 600-pound class. The completely enclosed engine is mounted independently of and in front of the operator.

During flight, the operator controls the device by leaning in the desired direction. It can land on a four-square-foot area.

THE ARMY'S DIVISION AIR DEFENSE (DIVAD) gun system, now formally known as the Sergeant York Air Defense Gun, has been ordered into full production. It is a radar-directed automatic gun system that will be used to defend forward maneuver battalions, the new Abrams tanks, and the Bradley fighting vehicles against attack by fixed and rotary wing aircraft.



The Sergeant York system is mounted on a modified M48A5 tank chassis. Its armored turret contains two 40mm guns with search and track radar, a fire control center with a laser range finder, and a digital computer. It can search, track, and shoot while on the move.

The Sergeant York gun batteries will be part of the air defense battalion in each of the Army's armor and mechanized infantry divisions. The first battalion is scheduled for deployment in 1985.

PROFESSIONAL MEDICAL personnel from the Army, Navy, and Air Force have been learning the rigors of



field medicine during an eight-day Combat Casualty Care Course (C4) at Camp Bullis, Texas. During Fiscal Year 1982, more than 1,200 military personnel took the course, and came away with a far better appreciation of the unique and rigorous demands of combat field medicine.

The curriculum includes triage, nuclear-biological-chemical warfare, bandaging and splinting, and medical support during combat. It is expected that 20 classes of 120 students each will go through the course during Fiscal Year 1983.

Although most C4 students are active duty physicians, each class also trains a few nurses and dentists, as well as personnel from Army Reserve and National Guard units.

THE ARMY'S FIRST PATRIOT BATTALION, the 1st Battalion, 43d Air Defense Artillery, officially became operational in May 1982.

Plans call for the Patriot to eventually replace both the Nike Hercules and Hawk air defense systems. It is a tactical air defense system that is designed to attack and destroy several enemy aircraft while at the same time tracking many more.

The missile uses a concept called track-via-missile guidance. As the missile reaches the vicinity of an enemy aircraft, it tells the radar of its location in relation to its target. A computer then makes a calculation and directs the missile in a path that ensures a kill. The missile has a proximity-fuzed warhead and can destroy a target by passing close to it without actually hitting it.



MARINES AT CAMP LEJUENE recently tested two versions of a new weapon that has been specifically designed to be used against enemy bunkers and other heavily fortified positions. It is called the Shoulder-Launched, Multi-purpose Assault Weapon (SMAW).

The SMAW has a dual-purpose warhead that is particularly well suited for use in combat in urban

areas, because it can modify its explosive power to handle a variety of targets. Thus, if the 81mm rocket-propelled warhead hits a hard target, such as steel or concrete, it will detonate immediately; if it hits a softer target, such as an earth or sand-bag reinforced bunker, its detonation will be delayed until the round has actually penetrated the target.

The SMAW weighs about 14

pounds and can be handled easily by a single soldier. It is designed around a reusable launching tube and an accurate sighting system that will permit trained gunners to hit even small targets at ranges out to 250 meters. The reusable launchers are also fitted with a spotting rifle that fires a tracer round to give the gunners an idea of their aim before triggering the main projectile.

FORT BRAGG WAS THE FIRST Forces Command post to receive the Stinger, one of the Army's new air defense weapon systems.

The Stinger, a portable, infrared heat-seeking air defense guided missile, is shoulder-fired and is designed to shoot down high-speed, low-level, ground attack aircraft. It can also be used against other targets such as helicopters and observation and transport planes.

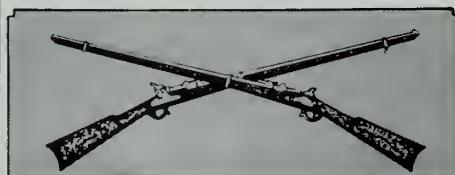
The weapon weighs 35 pounds and

its launch tube is thrown away after the missile is fired. (See INFANTRY, May-June 1981, page 8.)

THE EXCEPTIONAL FAMILY MEMBER PROGRAM (EFMP) is a voluntary Army program to help soldiers with family members who require special education or medical services. It was formerly called the Handicapped Dependent Program.

All soldiers on active duty with ex-

ceptional family members are eligible to take part in the program. AR 614-203 outlines the program, and DA Pamphlet 600-8, Procedure 4-11, gives the application procedures.



FORUM & FEATURES



THE DIFFERENCE

DANDRIDGE M. MALONE

A major malfunction that might occur in the process of developing company-level leaders will certainly occur when the leadership of a unit does not put enough effort into recognizing, emphasizing, and using THE DIFFERENCE.

Of the 169 men in a full strength company, 43 are officers and 126 are not. Therefore, 43 soldiers are in the leadership of the unit and 126 are not.

And that's THE DIFFERENCE. There is a line between them.

The line is totally unimportant in terms of making the 43 "better" individuals than the 126. Any one of the 169 can be as good a man as any other. The line is extremely important, though, in terms of making it possible for the leadership of the unit to lead the unit.

Any organized effort involving two

or more people must have someone in charge. There must be leaders and followers, and leaders and followers do different things. Leaders analyze, organize, deputize, and supervise. Followers execute. The line establishes THE DIFFERENCE between the two. New lieutenants and new sergeants, just as they have a hard time balancing mission needs with men needs, also have a hard time learning THE DIFFERENCE between leaders and followers.

Somewhere among your young able and willing soldiers there's probably one that you have started on the road to becoming a leader. You picked him out because he seemed to be the "main man" in one of those informal buddy groups that hang around together. Now, why do you think his buddies looked at him as the main man? It was because he knew, better than anyone else, what was inside his buddies, how they felt about the Army and about their jobs, what their attitudes were, what their needs were. And he was the main man because he, better than anyone else, could speak for them, and pass on their attitudes and needs to the leadership.

That's what makes an informal



leader of either a good group or a sorry group. He knows his buddies' attitudes and needs, and they think he's the one who can most probably get something done about them. That's why they put him in charge, informally, of course. Then you come along and put him in charge, formally. You did right, because he's a leader, in your eyes and theirs.

This young man, as an informal leader, is an expert on the needs of his men. But at this stage, there is no way he can do the balancing between mission and men, which is so critical. He knows little about the needs of the mission. When you bring him across that line that separates leaders from followers, the needs of the mission are what he must learn. And then, when he's started learning those, he

will begin to understand the price he has to pay to become a leader of men.

Nothing good ever comes for free. What he will learn is that never again, as a leader, can he be one of the boys. He has crossed the line. He has graduated. He is different.

Now that he's different, he's got to find some new buddy groups. He's got to hang around with leaders, and not with the boys. And that's why brand-new sergeants should be reassigned within their units. And that's why, in good units, there are separate areas in the mess halls where sergeants can talk about sergeants' business. And that's why, in good units, there are separate NCO clubs where they can talk about it some more. And that's why there are separate NCO rooms in the barracks

and why there are separate NCO get-togethers, meetings, and activities.

All this has nothing to do with NCO prestige. The purpose of all this separating is to teach, to develop, to strengthen, to clarify THE DIFFERENCE between those who are part of the leadership and those who are not. The better the leadership of the unit does this separating, the better the unit will be led.

DANDRIDGE M. MALONE, a retired Infantry Colonel, has published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools, including the Armed Forces Staff College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

ARMY AVIATION

An Insider's View

CAPTAIN KEVIN G. SCHERRER

Despite its growing importance as a member of the combined arms team, Army Aviation is still at times mis-treated, misused, and misunderstood by ground commanders at all levels.

An aviation unit's effectiveness on the battlefield depends on the availability of its equipment, the proficiency of its aircrews, and its thorough and complete integration with the ground maneuver and fire support elements. Accordingly, ground commanders and their operations people must thoroughly under-

stand a supporting aviation unit's capabilities, limitations, tactics, and methods of employment if they expect that unit to be of much help to them.

The first thing they must understand is that there will never be enough aircraft available to satisfy everyone's desires. This means that during peacetime training, ground units should request only those missions they would realistically ask for in an active combat situation.

Equipment limitation is something

else ground commanders and their principal staff officers are going to have to learn to live with. For example, the cargo hook of a UH-1 helicopter is rated at 4,000 pounds. This does not mean the helicopter can carry two tons of ammunition. A UH-1 aircraft usually has an operating weight, before loading, of some 7,500 pounds. Because its gross operating weight is 9,500 pounds, the UH-1 can carry only 2,000 pounds, or one ton, of cargo. And even that figure might be reduced by such en-



vironmental conditions as temperature, wind, and pressure altitude, all of which significantly affect helicopter performance.

No one is saying that ground commanders must become experts on the technical aspects of their aviation resources. But during their mission planning they do need to understand and carefully consider the limitations of their supporting aircraft. They can and should get the technical assistance they need from the people in their supporting aviation units.

Sadly, coordination between ground and aviation units today is not particularly good, and it is usually conducted only on a case-by-case basis. (In a tactically "hot" situation, this sort of coordination might well be a day late and a dollar short.)

Flight platoon leaders and S3 Air officers must establish and maintain an extremely close working relationship so that the basic principles of employing Army Aviation resources are well understood before an actual mission must be flown. But this is a two-way street, and the flight platoon leaders must also understand the employment concepts and the task organization the ground unit will use.

As with any of the combat arms, the tactics used by aviation units are those that will allow them and their supported units to accomplish their missions and to survive on a mid-to-

high-intensity battlefield. An aviation unit, therefore, will be chiefly concerned with an opposing force's anti-aircraft weapon deployment, because a large number of diversified and highly efficient air defense weapon systems have been developed and deployed by many armies during the past decade or so. In fact, it seems that every altitude and every kilometer of airspace above and around the front lines is covered by at least one such system.

This fact, more than any other, has led Army pilots to develop and refine terrain flight and nap-of-the-earth (NOE) tactics to conceal their positions from the opposing force. No longer can an infantry commander realistically expect to fly convoy cover at 2,000 feet or expect his attached helicopter gunships to orbit the lead elements of his maneuver force.

Today, airmobile assaults should be planned to fly over heavily vegetated terrain at the lowest possible altitude, and the pilots must use draws, valleys, and ridgelines properly to gain the greatest possible tactical advantage. And while attack helicopters should certainly be integrated into the ground commander's plan to supplement or support his available ground firepower, they must be given the freedom to choose their own battle positions as the terrain dictates. In

short, effective terrain utilization is the key to survival on the battlefield for Army Aviation.

WEATHER

Perhaps the most misunderstood of all aviation-related phenomena is weather, but the popular notion that pilots take to the snack bar at the sight of a cloud is definitely not true. The minimum meteorological conditions required for flight are somewhat complicated in that they may vary with each command, at each airfield, or for each aircraft. Thus, minimum conditions in the United States differ from those in Europe, and a CH-47 can be flown in conditions that could easily call for grounding an OH-58.

It is also important to know that for flights under visual flight rules (VFR), visibility and ceiling minimums must be met at the point of departure, at the point of landing, and en route, while for flights under instrumented flight rules (IFR), only the origin and destination ceilings and visibility requirements need to be satisfied.

The list of factors that must be considered for each flight, regardless of the type of aircraft, are winds, outside air temperature, dew point, ceiling, visibility, icing, thunderstorms, turbulence, precipitation, humidity, and freezing level. A final thought: roughly one-third of all Army aircraft accidents are "weather-related."

Aviation maintenance is another problem area whose importance, though often overlooked by a ground commander, simply cannot be ignored. A complicated (and perhaps fragile) piece of machinery, the helicopter nonetheless is often subjected to some pretty rough treatment, and it requires the utmost attention if it is to be kept flying.

Aircraft scheduling — to ground commanders a thoroughly illogical business — is normally accomplished by an aviation maintenance officer, who really does have the best interests of the supported units in mind. A ground commander must appreciate

the aviation unit's problems in this regard and should never forget that if his supporting aircraft are not properly maintained, they will be subject to failure in flight, a condition that usually brings with it undesirable results.

It should come as no surprise, therefore, that Army Aviation devotes more time, effort, and money to safety than does any other agency. Several safety-related items should be particularly noted by all ground units:

- The pilot-in-command is the final authority for the safe operation of the aircraft.
- Every Army flight is controlled

and monitored by the use of flight plans. It is imperative that unless a flight plan is changed en route the aircraft remain on its intended route as filed on the original flight plan.

- Standards for scheduling crew rest must be adhered to, and ground commanders must acknowledge and support crew rest if they really want to prevent aircraft accidents.

The organizational changes that are now taking shape in the Army's basic structure will put Army Aviation side-by-side with its combat arms brothers, but aviation and ground units cannot wait for all of the TOE changes to take effect before they start working together more closely.

They should be taking specific steps now toward tighter integration if their mutual potential is to be fully realized.

Education is the key to this integration; greater combat power is its inevitable result.



CAPTAIN KEVIN G. SCHERRER, an Engineer officer, is a UH-1 platoon leader in the 503d Aviation Battalion, 3d Armored Division, where he previously served as Assistant Operations Officer. He is a 1977 graduate of the U.S. Military Academy.

Attack Helicopters

LIEUTENANT RONALD M. BUFFKIN

In recent issues of INFANTRY Magazine, Major General Sam Wetzel has concluded his Commandant's Note with "Practice Combined Arms."

While many infantry commanders, fortunately, know the full meaning of these words, there are still others who do not. Too often, commanders fail to integrate and use all the elements that make up the combined arms team, and one of these neglected elements is the attack helicopter (AH), the Cobra. It is highly maneuverable, has great firepower, and can be used in a number of different ways.

The infantry commanders who may not be aware of the attack helicopter's value to the combined arms team should find these guidelines useful.

First, the commander has to decide when helicopters can be used to the best advantage. An Army helicopter company (AHC) performs best when it is part of the commander's overall ground scheme of maneuver, and it should be used when concentrated combat power and mass fires are needed. Its ideal target consists of large mobile armored or mechanized forces. It should not be used against well-fortified, dug-in positions; one tank is never worth one attack helicopter.

In situations where no effort has been made to suppress the enemy's air defense weapons, the AHC aeroscout should be allowed to use the unit's supporting field artillery or tactical air assets to neutralize any air defense threat he encounters when positioning the AHC.

The terrain also must be carefully considered in any decision to use attack helicopters. Cobras are thin-skinned and need terrain that will provide protection, a standoff capability, and covered and concealed routes in and out of the target area.

If the target and the terrain are suitable, if the AHC will be fighting in conjunction with friendly ground forces, if concentrated combat power and mass fire are needed, and if air defense threats have been suppressed, then the situation is ideal for attack helicopter employment. Rarely will all these criteria be met at the same time. But one unique capability of the AHC is that its mobility makes it flexible in dealing with the rapidly changing requirements of the modern battlefield.

Once a commander decides to use

attack helicopters in a battle, he can improve this flexibility by providing them the time and the intelligence they need. Cobras are not magic dragons that appear on the scene by cruising forward at 120 knots with guns blazing. They have the same speed and security considerations that all maneuver units have.

Nap-of-the-earth flight, used to insure the helicopter's survival close to the enemy, is slow and deliberate. Because helicopters don't have the armor protection of ground fighting vehicles, they have to keep terrain between them and the enemy.

The best way for a commander to

that would be impossible for other combat aircraft. While low ceilings are not a problem for the AH, visibility can greatly influence its effectiveness.

FIREPOWER

The 3,700-meter standoff capability provided by the Cobra's TOW gives it long-range antitank firepower. When the visibility drops below one-half mile, though, the AH's ability to acquire targets and use its standoff capability is reduced. The commander should be guided by



reduce the time an AHC needs to move and still be responsive to his needs is to put the AHC's aeroscouts to work as soon as it is practical. He should allow the aeroscouts to operate well forward early in the battle.

The aeroscout's primary mission is to see the battlefield, to acquire targets, and to coordinate the movement of the attack helicopters. He needs to coordinate with the company team or the task force commander. He does this through either secure radio or face-to-face contact.

A third major consideration for the commander is weather and darkness. Of all the air assets available to a maneuver commander, Army aviation has the best capability for fighting in poor weather. Because of the helicopter's unique maneuverability, speed, and operating envelope, an AH can maneuver on the battlefield in weather conditions

the AHC's liaison officer or its commander in deciding how visibility is affecting its operation.

Night combat is the least suitable for AH operations. The AH can fly at night, but its night vision and fire control equipment is not yet totally compatible with the requirements of the modern battlefield. This means that if a situation arises where the AH is needed at night, careful coordination and deliberate planning must be made in advance. The NOE mode of flight is extremely hazardous at night and it makes movement to a target area slow. Depending on the night vision equipment limitations of the AH, the target area will have to be illuminated either by the AH's 2.75-inch rockets or preferably by the maneuver unit's artillery or mortars.

The commander must also plan for adequate rest for the helicopter crews. Crew rest policies are dictated by Army Regulation 95-1 and by

various local directives. They provide for the maximum effective use of aviation assets and basically establish a time limit on how long each day an aviator can perform pilot duties. The AHC commander will keep the maneuver commander informed of the condition and availability of his air crews. It is important that the maneuver commander recognize this factor.

When the AHC is placed under the control of a maneuver element, the AHC will send a liaison officer to the supported headquarters. This officer will pass missions and tactical information to the AHC and advise the ground commander on the employment of his helicopters. The liaison officer is usually equipped with a quarter-ton or an M880 type vehicle complete with secure radio equipment for communicating with the AHC. This officer needs access to all the intelligence and operations information that is normally made available to other subordinate maneuver units. He should be located with the element that is fighting the battle at the time. This may be the brigade tactical operations center, the commander, or the S-3. In this way, the AHC can be most responsive to the commander. The liaison officer is the critical link in the chain of events that leads to the effective use of the AH.

If an Infantry commander understands these major points concerning the use of attack helicopters, and if he has a general knowledge of FM 17-50, Attack Helicopter Operations, he will be better able to use attack helicopters as part of his combined arms operations.



LIEUTENANT RONALD M. BUFFKIN is a company flight operations officer with the 501st Aviation Battalion (Combat) in Germany. Commissioned from the Officer Candidate School, he is an Army aviator and has served as an aeroscout section leader and as an attack helicopter liaison officer to maneuver units.

CACC System

CAPTAIN STEPHEN ORLOFF

In the 101st Airborne Division (Air Assault), an infantry unit commander must insure that the aviation resources he is given to support his particular operation are closely integrated with the requirements of his ground tactical plan. In the Division, it is usually an air assault company team that is assigned a tactical mission. This team normally consists of a ground element (an infantry company), a lift element (four to six UH-60 Blackhawk helicopters), a security team (one or two AH-1S Cobra gunships), and a screening element (an air cavalry "pink team"). The team is quite mobile, has a considerable amount of firepower, and can react quickly to changing tactical situations.

To keep the control problems that can accompany this blend of ground and aviation resources to a minimum, the division has established the Combat Aviation Control Center (CACC) system. The senior officer in the center itself, usually referred to simply as the CACC, is an experienced aviator who centralizes air forecasts and acts as a liaison officer between the ground and aviation units.

At the battalion level, a CAP (Combat Aviation Party), which is also headed by an aviator, provides the same kind of assistance to the battalion as the CACC does to the brigade.

Finally, each maneuver element within a battalion has a CAT, or Combat Aviation Team. The CAT

has from one to three pathfinder-qualified soldiers, and their chief function is to provide a direct link with the aviation elements for the ground unit commander. They also supervise and assist in preparing pickup and landing zones, and closely monitor all rigging and slingloading operations.

Because they provide their own combat aviation net (CAN), each member of the CACC team can swiftly adjust the aviation plan as required



by changes in the ground plan of maneuver.

The CACC also plays an important role during the planning stages of an air assault operation, for the various aviators not only broaden the base of understanding with regard to the aviation side of the house, they are immediately available to clarify for the ground commanders what the aviation units can and cannot do. For the ground commander, the S3 Air, who is his movements control officer,

must work closely with the CACC during the planning phases.

Once an operation begins, the CAT with the air assault team, using its own communication net, monitors and controls the air support and the air lift. At the same time, it passes to the company team commander any information pertaining to the aviation plan. This special communication loop frees the company command net from traffic that may not be vitally important to the operation.

The air liaison function performed by the various CACC personnel relieves the S3 Air from having to monitor air traffic once an operation starts, and this allows him to get ready to handle any subsequent movement requirements his commander may place on him.

The modern battlefield will have many challenges for all members of the combined arms team. Incorporating new technology and doctrine with age-old infantry fundamentals is one such challenge. Never before has an infantry commander had such a vast array of resources with which to conduct war. The CACC system can be regarded as a useful tool that a ground commander in an air assault unit can use to accomplish his mission.

CAPTAIN STEPHEN ORLOFF is now attending the Infantry Officer Advanced Course. He is a 1978 graduate of the U.S. Military Academy and recently completed an assignment as S3 Air of a battalion in the 101st Airborne Division (Air Assault).

Communicating in Battle

CAPTAIN GREGORY J. PREMO

The U.S. Army is rapidly approaching a time when almost every soldier will have access to a tactical FM radio. One proposed Division 86 TOE would place more than 100 FM radios in a mechanized infantry headquarters company. This is a symptom of our excessive reliance on radios as our primary controller of soldiers in combat. As a result, the competition for the use of the electromagnetic spectrum on any future battlefield, on both sides, will be staggering.

In addition to deliberate jamming, unintentional interference between friendly and enemy emitters using the same frequencies will present a very real problem to the tactical communicator. A multitude of other communication disrupters — such as power generators, electrical power lines, and automotive spark noise — will contribute to the problem. To make matters worse, Mother Nature will also conspire to deny effective communications with dead spots, the terrain, and atmospheric anomalies.

But the real problem may be that few of our radios will survive to face these interference problems. Assuming that the next war will begin in Europe from a "standing start," we can also assume that, if we face Warsaw Pact forces, those forces will fire the first shots. In that hypothetical battle, these first shots undoubtedly will be directed against NATO command and control communications (C3), because Soviet doctrine places

command posts at the very top of its targeting priorities.

Commanders who believe that they will have effective command and control over their combat forces through the use of electronic communications after the start of such a battle are in for a shock. They need to reorient their thinking now so that they will have a more realistic idea of what is going to happen on that battlefield.

CONFUSION

For example, NATO's intelligence community should be able to give at least a 24-hour warning of an impending attack. As NATO forces deploy to their defensive positions, they will come under keen observation by Soviet human and electronic intelligence surveillance. Soviet radio-electronic combat elements should have little trouble in rapidly compiling an electronic order of battle, given the confusion such a rapid deployment would cause for NATO forces and the subsequent reliance of these forces on electronic communications to sort out that confusion.

It is not beyond the realm of possibility that Warsaw Pact battle plans include a preemptive nuclear blast at high altitudes over their own territory for the sole purpose of damaging and disrupting NATO's electronic equipment through the

effects of an electromagnetic pulse (EMP). (A nuclear armed anti-satellite destroyer could produce similar results.) EMP from beyond the atmosphere would damage or disrupt electronic communications and computer equipment for hundreds, possibly thousands, of miles. Because it is most effective against semiconductor and transistor technology, upon which NATO's forces rely almost exclusively, EMP would have disastrous effects on NATO's communications equipment. (Of course, the later use of tactical offensive weapons by the Warsaw Pact nations could produce the same EMP effects, in addition to their traditionally recognized destructive capabilities.) The equipment that may escape destruction by fire and EMP will then be subjected to massive jamming and to artful deception.

At this point, there are several questions we must ask ourselves. Assuming that such a catastrophe occurs on that hypothetical battlefield, will NATO's forces be able to cope with it? How effectively can commanders control a battle if they have lost half of their communication assets before they even begin to fight? How can an already unwieldy logistics system, without effective communications, resupply the units? Unfortunately, the overall answer may be that NATO forces will be reduced to independently operational battalion-sized units, fighting until



they run out of both bullets and fuel.

Units whose soldiers have routinely abused communication security procedures and ignored the electronic warfare threat during their training are not going to undergo a miraculous cure when the battle standard is raised. If we expect to survive the first hours of this battle, we must learn how to protect our communication means before the battle starts so that we will stand a better chance of communicating and succeeding in the battles that will follow.

There are no secret formulas for protecting our communications. All we have to work with is what we have failed to emphasize from the start — training!

Without exception, our current tactics for engaging an enemy who is superior in firepower and in numbers require instantaneous and survivable communications. Yet at almost every level of tactical command, our planning and training are conducted without due consideration for the EW threat. We must, therefore, train our forces to use the equipment, the EW doctrine, and the combat tactics that we have in such a way as to reduce the enemy's ability to use our own radios and radars against us.

We must incorporate planning and

training for the electronic battle into the programs of instruction of our service schools, into each doctrinal publication, and into all tactical unit training. We must develop a consciousness of EW in all echelons of command, and we must see that it becomes ingrained, right down to the infantry squad leader.

Here are some of the specific steps we can take toward that end:

- Study current EW doctrine. Every communication or radar user should be an expert in the philosophy and tactics of current electronic countermeasures (ECCM).

- Push for the immediate fielding of the directional antennas now under development. Train with and use field expedient directional antennas and antenna employment techniques.

- Reduce the amount of "on the air time" required by doctrine, such as artillery fire direction center (FDC) readback of calls for fire.

- Rely on alternate means of communication for pre-attack message traffic; a tactical FM radio should not be used until contact is made with the enemy.

- Recognize that it is highly unlikely that the research and development effort of the past 10 or 15 years can be turned around to come to our

collective rescue in the nick of time with cost effective, survivable communication equipment and weapon systems.

- Incorporate EW training into every phase of training and at every level every time electronic communications and non-communications (radar) equipment is used.

- Penalize units that abuse electronic communication means during training.

The answer to immediate EW survivability does not rest with equipment black boxes and tricks. The answer lies in constant training and in overcoming a 30-year history of communication abuse. Until we make a firm commitment to correct these deficiencies, we will continue to abuse our electronic assets, and we will face the possibility of committing electronic suicide on tomorrow's battlefield.

CAPTAIN GREGORY J. PREMO, now assigned to U.S. Army Readiness and Mobilization Region VII, was formerly assigned to the Command, Tactics and Doctrine Department of the Infantry School. A 1972 ROTC graduate of the University of Georgia, he has also completed the Signal Officer Basic and Advanced Courses, and has served as a communications platoon leader, an assistant S3, and a company commander.

URBAN SNIPERS

MAJOR WAYNE A. SILKETT

Nobody really wants to fight in cities and towns. Such operations are difficult, costly, and time-consuming. For this reason, built-up areas should be isolated and by-passed whenever possible. This is sound doctrine, regardless of who preaches it.

But the modern battlefield may not allow for the isolation and by-passing of built-up areas. This is especially true in Europe, where almost every day urban sprawl does away with more and more maneuver room.

Nevertheless, urban warfare can work to the advantage of an outnumbered defender. It not only provides an opportunity for greater mutual support and defense in depth, it can seriously slow the momentum of an enemy's attack and substantially increase his losses.

One way to make it easier to fight outnumbered and win in such operations is to use snipers on a large scale. When they are integrated with all other means of urban defense, snipers

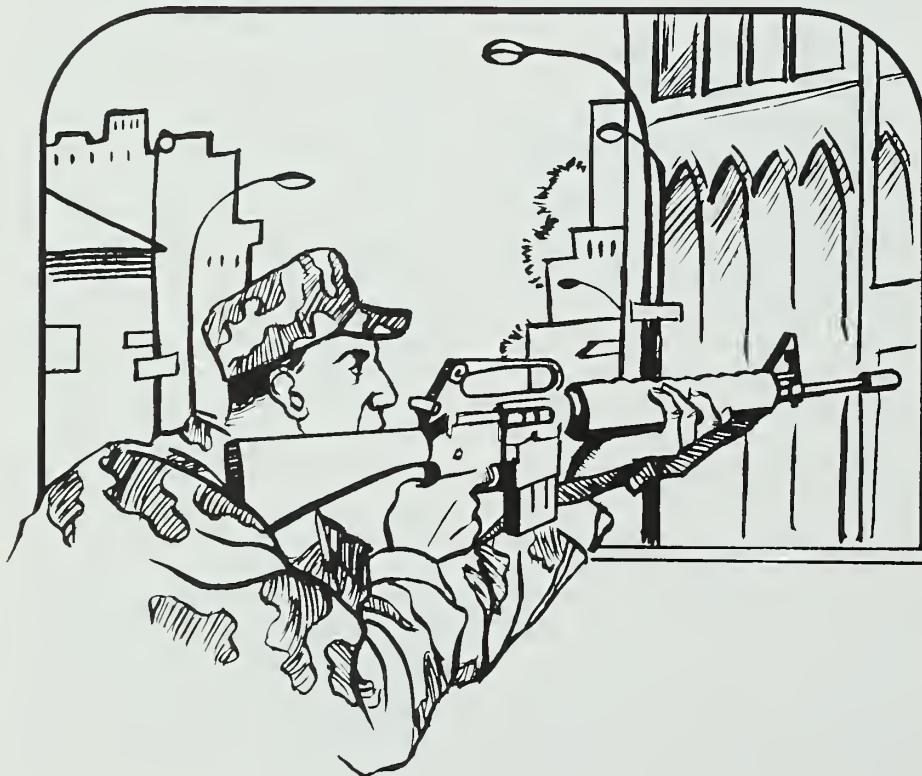
can be one of the most mobile, lethal, and cost-effective defensive measures used in urban combat.

Snipers have always been misunderstood and generally neglected. They have been considered a psychological weapon with more nuisance value than anything else. Historically, though, this has been because their employment was on a small scale and because they were often used in a haphazard manner. The time has come to consider the advantages of using snipers in large numbers in urban warfare.

How many snipers would be needed? There should be at least two snipers in each rifle platoon, which is six per company, or 18 per battalion. Even this number may not be enough, but it is a starting point.

An urban battlefield is well suited to the use of snipers in such numbers, perhaps moreso than any other combat environment. Cities and towns, intact or otherwise, provide excellent cover and concealment and are well suited to a defense in depth. And an urban battlefield is truly three-dimensional, with sniping positions and opportunities virtually unlimited. This, in addition to his own high degree of mobility and knowledge of the area, makes the sniper less accessible to the enemy and less vulnerable than other defensive measures.

One sniper cannot be everywhere, obviously, but several snipers, perhaps dozens per defensive sector,



can be almost everywhere — or they can certainly seem to be. Numerous well-trained and imaginatively used snipers can achieve the following objectives:

- They can inflict high losses on enemy officers and NCOs, who can be expected to be up front, particularly in urban combat, where decentralized operations require close contact and supervision.
- They can kill such critical personnel as reconnaissance and communication troops, vehicle commanders, engineers, and exposed artillery crewmen.
- They can force vehicle crews to button up, reducing their vision and thereby increasing the vehicle's vulnerability.

• They can slow an enemy's advance and dilute his offensive capability by making him divert his resources for the clearing, denial, retention, and monitoring of likely sniper locations.

• They can cause heavy losses and increase the psychological strain on the attacker and damage his morale.

No one seriously expects snipers — in whatever numbers — to win every urban battle. The combined efforts of infantry, artillery, combat engineers, armor, and air power may not win every one, either, especially when the defending force is seriously outnumbered. But if an urban defense cannot always defeat an enemy, it can always delay him, disrupt his offensive timetable, tie him down, and in-

flict high losses on him.

Friendly forces may have to fight outnumbered, but they do not have to be outfought. A number of well trained, resourceful snipers, imaginatively employed, well-coordinated and well integrated into the overall defense, could help make the difference between winning and losing.



MAJOR WAYNE A. SILKETT, now assigned to the Defense Intelligence Agency, previously served with the Berlin Brigade. He holds master's degrees from Boston University and the University of Southern California and has completed the Command and General Staff College.

Arctic Airborne Mortars

STAFF SERGEANT JOHN E. FOLEY

Alaska, a land of few roads with limited aviation support, lines of communication that are measured in hundreds of miles, and sometimes brutal weather conditions, represents a real challenge to the weapons platoon of an arctic airborne infantry company. I know. I had three years of experience with such a platoon and went through everything Alaska had to offer during three mortar ARTEPs, numerous field training exercises, and year-round training in mountains and muskeg.

From this, I have come to the conclusion that the present MTOE for the weapons platoon in the arctic air-

borne infantry company is not only unworkable, it is also unrealistic. The major problem areas can be grouped under three general headings: manpower, mobility and firepower, and antiaarmor capability.

Manpower

Its current MTOE gives the platoon a total of 1 officer and 17 enlisted men. These 18 soldiers must carry three complete 81mm M29 mortars and, during the winter months, must tow a minimum of two akhio tent groups. In addition, each man must

carry his individual weapon and a rucksack. When the unit goes to the field, every man carries either a radio or a major gun component, plus one round of 81mm mortar ammunition. The tent groups are critical during the winter months, and the rucksacks are a must during all seasons of the year. Unfortunately, when the platoon is engaged in a fire mission, no one is available to provide security.

The platoon needs at least eight additional soldiers — two radio-telephone operators in the headquarters squad plus two ammunition bearers in each mortar squad. These would give the platoon enough men to



switch off the heavy loads, to carry more ammunition, and to provide security during its fire missions.

Mobility and Firepower

The platoon now has four M880 series trucks, but it is not authorized any drivers for them. This is probably just as well, since the trucks are seldom used during operational missions. They cannot be air-dropped, their cross-country performance is only marginal, they break down frequently, and spare parts are hard to get. When they are operational the company usually takes them to use as resupply vehicles.

The M880 truck presents other problems as well: It is under-powered, it cannot carry a mortar, its crew, and its authorized ammunition at the same time, and a mortar cannot be carried mounted on the vehicle or fired from it.

Therefore, the platoon is badly in need of a suitable vehicle, one like the M125A1 mortar carrier or the Commando VO-150 armored car. The vehicle must be one with a good cross-country capability, one that a

mortar can be fired from, one that can carry the portion of the basic load of ammunition that goes with the mortar (80 rounds), and one that can be air-dropped and sling-loaded by helicopter. The vehicle should also be equipped with two radios and should have a mount for either a machinegun or an automatic grenade launcher.

The most important thing is for the platoon to have vehicles that are suited to its mission; we should quit trying to fit the platoon's mission to its vehicles.

The right kind of vehicle would also ease the platoon's firepower problems. The platoon requires large quantities of ammunition when it is engaged in combat firing missions. Without appropriate vehicles, the platoon is now forced to rely on its own manpower and on airborne and airmobile sources of resupply. The latter presents great problems in Alaska, because of the distances aircraft have to fly and because of the bad weather conditions that often prevent aircraft from flying.

With vehicles that could be air-dropped along with the soldiers, the platoon's full ammunition load could be moved from its drop zones, and an

adequate resupply effort could be established. As it is, even with airborne and airmobile support, the platoon simply has no way to move large quantities of ammunition when it moves from one firing area to another.

Antiaarmor

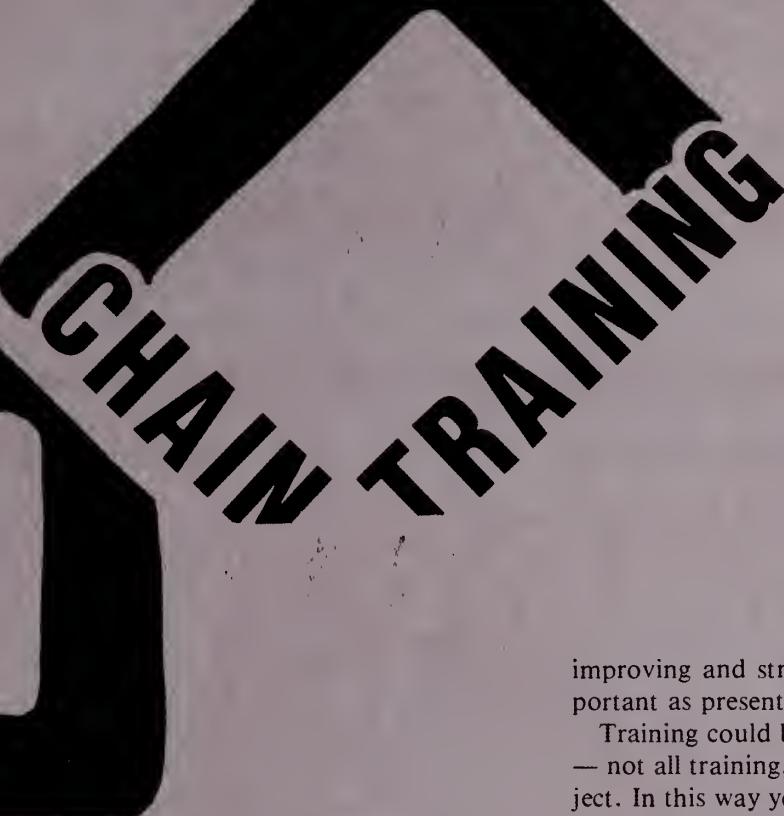
Because an arctic airborne rifle company does not now have an authorized antiaarmor section, I believe an antiaarmor section should be formed and assigned to the weapons platoon. Initially, the section would consist of a section sergeant and three three-man gun teams armed with the six 90mm M67 recoilless rifles that the company does have. At a later date, the section could be equipped with the Viper antiaarmor weapon and keep the same organization. Each man could carry four or five. The section, of course, would need its own vehicles, three at least.

Without these additional soldiers and these materiel and organizational improvements, the platoon will continue to be tied down to an area within a few kilometers of its base camp, and it will remain severely restricted as to the amount and kind of ammunition it can carry.

With the suggested additions and improvements, the increase in the platoon's mobility and firepower would revolutionize tactics and movement in the Arctic. The changes in manpower, mobility and firepower, and antiaarmor organization would enable the platoon to move, shoot, and communicate anytime and anywhere in Alaska.

STAFF SERGEANT JOHN E. FOLEY, now assigned to the cadre of the U.S. Army Infantry School, recently completed an assignment as a weapons platoon section sergeant in Alaska. He has attended several military schools and courses including the Jungle Warfare School and the Ranger and Jumpmaster courses.





CHAIN TRAINING

MAJOR GENERAL JOHN R. GALVIN

It's instructive to go back and look at your own ideas from an earlier time. It's sometimes embarrassing, too — "Is that what I really used to think?" It can also be dangerous if, for example, you start congratulating yourself on the great thoughts you had as a young officer.

As an Infantry captain I had the usual "basic load" of ideas, some good and some bad, about what I'd do if I were in charge of the whole dang outfit. One of those ideas made its way into the pages of INFANTRY almost twenty years ago (see the May-June 1963 issue, pp. 54-55). The subject was something called "chain training," which meant the use of the unit chain of command in training, with the leaders at each level serving as instructors for their immediate subordinates. There was a way, I thought, to achieve leader development and at the same time to tailor the training to fit the level of the recipient.

Our Army has always emphasized the importance of the chain of command in discipline, esprit, and successful operation in every unit. Further, the Army teaches leadership as well as military doctrine, and in a unit

improving and strengthening Army leadership is as important as presenting classes.

Training could be passed down the chain of command — not all training, but some of it, depending on the subject. In this way you could tailor training to the needs of each soldier, no matter where he fitted into the chain of command. Offensive tactics, for example, ought to be taught in one way to a battalion commander and in quite another way to a squad leader.

Over the years I have tried this approach in various units, and I must admit it has grown somewhat easier to implement in my present job than it was when I was a company commander!

Chain training can begin at any level — even at division, where the division commander conducts training with his immediate subordinates (assistant division commanders, brigade commanders), who then adapt the instruction and present it to the battalion commanders, who in turn see that it is passed all the way down to the soldiers at the end of the chain.

On its way down, the subject of the training is adjusted in the same way an operations order is fitted to each level. Each leader is given only the amount of instruction and the coordinating details he needs to prepare himself and to teach his subordinates the same subject.

I gave a couple of examples in that INFANTRY article — examples that have a quaint and antique ring to them now:

Map reading, field fortifications and first aid are classes scheduled for a given day in garrison. At an opportune time a week ahead, the company commander briefs the platoon leaders on these classes. He points out that while certain other subjects (a new CBR alert class and a practice involving drill) will be in charge of a specific instructor and attended by the whole company, map reading, field fortifications and first aid will be

chain classes. He tells them the phase to be taught, the important points to be stressed, and what he expects the troops to learn from the classes. He discusses coordinating details: areas, training aids, reference material, times, etc.

The platoon leaders explain to their squad leaders the subjects of the chain classes, the level of instruction required and the coordinating details. A discussion class serves to refresh the squad leaders as necessary, and to bring out the details to be stressed. Rehearsal times are appointed if required. Responsibilities for training aids, supplies, and areas are assigned.

The squad leaders, assisted perhaps by key men in the squads, present the instruction. Platoon leaders supervise, with the emphasis on assistance in planning and coordinating activities before the class takes place, rather than on corrections after the class is over. The class, which was a discussion at the squad leader level and above, is now largely practical work.

BETTER TRAINING

So much for reminiscing. Since those bygone days, the Battalion Training Management System has revolutionized training, driving out a number of ills and providing for what I consider a magnificent jump in the potential for better training. Chain training follows the principles of that system: it is decentralized, hands-on, and performance-oriented. Most important, it is based on a commander's continual first-hand evaluation of his subordinates. As he works with them, he becomes more and more aware of their capabilities and their shortcomings, and he adjusts his training approach based on his running evaluation.

At each level, the leader trains his immediate subordinates in the selected tasks — individual and collective — that lend themselves to this kind of tailored instruction. Here are some of the ways we have used chain training techniques over the past year:

- In order to involve the CG, the ADCs, and the

brigade-level commanders in MILES, we "suited up" and ran a squad attack and defense exercise, with the CG as squad leader versus the ADC-M as defending fire team leader. We learned that MILES is the greatest.

- Using Dunn-Kempf, half the key leaders (colonels and above) took on the other half. We learned what our lieutenants can get from this simulation.

- The top of the chain spent four hours together in a motor pool, followed by a couple of hours of PLL. We learned a bit more about what operators and first line supervisors are up against.

- All of us spent eight hours working on FM 25-2, with some imported help from the Army Training Board. We got our thinking together on BTMS.

These examples show what we "highers" did and what we learned; the same training was transmitted from level to level down through the division, fitted to the needs at battalion, company, platoon, squad, and soldier levels.

You have to be careful, of course, in evaluating the value and effectiveness of your own pet project, but I think that with command support and interest, we are:

- Learning at the top and all the way down.
- Tailoring the training better.
- Developing a greater sense of team spirit.
- Saving time — or at least, using time the way it should be used.

- Following the good advice of BTMS.

Chain training also fills an important gap — the comparative lack of individual training at levels above battalion. The Army Training Board and some other institutions have been working on this gap and I think some good things will happen soon. Right now I suggest that any echelon chain training is worth a look. You may, in fact, be doing this kind of training under other names and in different ways right now. If not, try it and see if it works for you.

MAJOR GENERAL JOHN R. GALVIN is Commanding General of the 24th Infantry Division at Fort Stewart, Georgia.



The Future of the INFANTRY

OFFICE OF INFANTRY FORCE MANAGEMENT
USAIS



Never before in our history have we in the Infantry faced as many changes in equipment, doctrine, force structure, and training as we face today. It has been said that today's technological change is so rapid that the art of war now changes as much in five years as it did in the period between World Wars I and II.

The advent of large-scale airmobile operations marked a significant change in the mid-1960s; the Arab-Israeli War of 1973 drastically altered our thinking, primarily on antitank warfare. By the late 1970s we were reasonably comfortable with our ability to stop first-echelon Threat forces and had begun to focus our attention on stopping second-echelon forces and on implementing the AirLand battle. We cannot help wondering whether this tempo of change will continue.

In the midst of such change, we always seem to be asking questions about the potential for survival of some of our systems — weapon systems and organizational systems — particularly as a result of the proliferation of highly sophisticated, extremely lethal weapons throughout the world. Can the helicopter survive in a mid-intensity conflict? Can the tank face the growing family of antitank guided missiles and still be effective on the battlefield? How do we mold today's Infantry into an organization that will be fit to fight on the battlefield of the future? Can the Infantry survive there?

There are even some people who question whether the Infantryman of the future will be able to perform his role in the combined arms team. They say that he is, in fact, no longer the nucleus of that team.

But it is the very unpredictability of the future that lends credence to the prediction that the United States Infantryman will be around for a long time. He will be around precisely because no one can predict when he will be needed or in what capacity. And he will be doing what he has always done — fighting or standing ready to fight on the ground, for the ground. In fact, as a result of the advancement of weapon systems and countersystems, future conflicts may be even more influenced by the Infantryman's ability to go and fight and endure where no machine or electronic system can survive.

The Infantry School has considered all these questions — these doubts and predictions — as they apply to various aspects of the Infantry system: doctrine, organization, training, material, and resources, and has learned that to develop a successful system for the future, the Infantry must have a purpose, a value system, and a philosophy from which to derive its direction and its goals. Any long-range goals, therefore, must come from an understanding of the Infantry's basic purpose and from a vision of how the various parts of the Infantry team contribute to the fulfillment of that purpose.

GOALS

The Infantry has certain broad goals that go beyond any specific combat scenario, goals that apply to all Infantrymen, regardless of component, major command,

or duty assignment. Each part of the Infantry, therefore, participates in its unique way in fulfilling the overall goals; each has a piece of the action.

These overall goals drawn from the Infantry's mission (as stated in Army Regulation 10-6) are to "close with the enemy by means of fire and maneuver in order to destroy or capture him or repel his assault by fire, close combat, and counterattack," and, in spite of the critics, to form "the nucleus of the Army's fighting strength around which the other arms and services are grouped." An additional goal, when not in combat, is to maintain "a state of readiness in preparation for immediate combat worldwide."

With the basic goals and purposes in mind, the Infantry School has begun the process of defining long range goals and objectives. These are expressed in the "Infantry Strategic Plan 2-82", published at Fort Benning in March 1982. While it does not pretend to be all inclusive, this plan takes into consideration the various types of war the Infantry may be called upon to fight in the future and lays out changes that may be needed in the elements of the Infantry system.

Obviously, Infantrymen will require equipment with still higher technology to meet these future needs, but their leaders cannot lose sight of the human dimension. Tomorrow's leader must train the soldiers to master the existing technology so that he can get the most out of what he has, because the next war will be won by people. The victory will go to the commander who can lead, motivate, and inspire. Small unit leaders — squad, platoon, company — will have to be imaginative and resourceful. They may find themselves isolated on a high-intensity battlefield with much of their equipment destroyed or rendered useless by an opposing force's sophisticated countermeasures. Or they may be alone on a security mission in support of regularly constituted civil authorities in an urban area.

No matter what new techniques of combat the Infantryman may be required to adopt and learn, he will not be able to discard any of the old ones. While the future Infantryman may race over the battlefield in a BIFV, flit around in a helicopter, or strap himself to an antigravity machine like Buck Rogers, he will not be able to neglect the skills that have sustained him on the battlefield for more than 200 years — the use of terrain, camouflage, marksmanship and stealth, and the basic tactics of fire and maneuver. Whatever sophisticated weapons he may employ, it is a good bet that he will still carry an individual weapon designed for one-to-one combat with a foe.

TRAINING

The ability of small units to succeed will depend on their training. Historically, the strength of the U.S. Army has been the individual initiative exhibited by its soldiers, plus their ability to think on their feet and to cope with changing situations. In the future also, the Army's training must build upon and expand these human capabilities.



From the total corps of young men whose self-worth depends in part on their skills as professional Infantrymen, certain ones will — as always — prove more skillful, quicker to learn, and more able to lead, and they will rise above their fellows in terms of professional accomplishments. If these leaders can be given the time to mature, the Infantry should develop the finest, most professional officers and noncommissioned officers the Army has ever known. The competition for advancement will be keen, and the winners should be truly outstanding soldiers.

A bright aspect of the Infantryman's future is the steadily increasing value of his training. A dedicated professional who is offered the training opportunities already established and the ever more valid and realistic training techniques of the immediate future should easily achieve standards of professional competence never before approached. Today's training devices, simulator systems, evaluation programs, and heightened emphasis on "hands on" training, backed by substantive, usable training literature, give the future Infantryman a great training advantage over his predecessors.

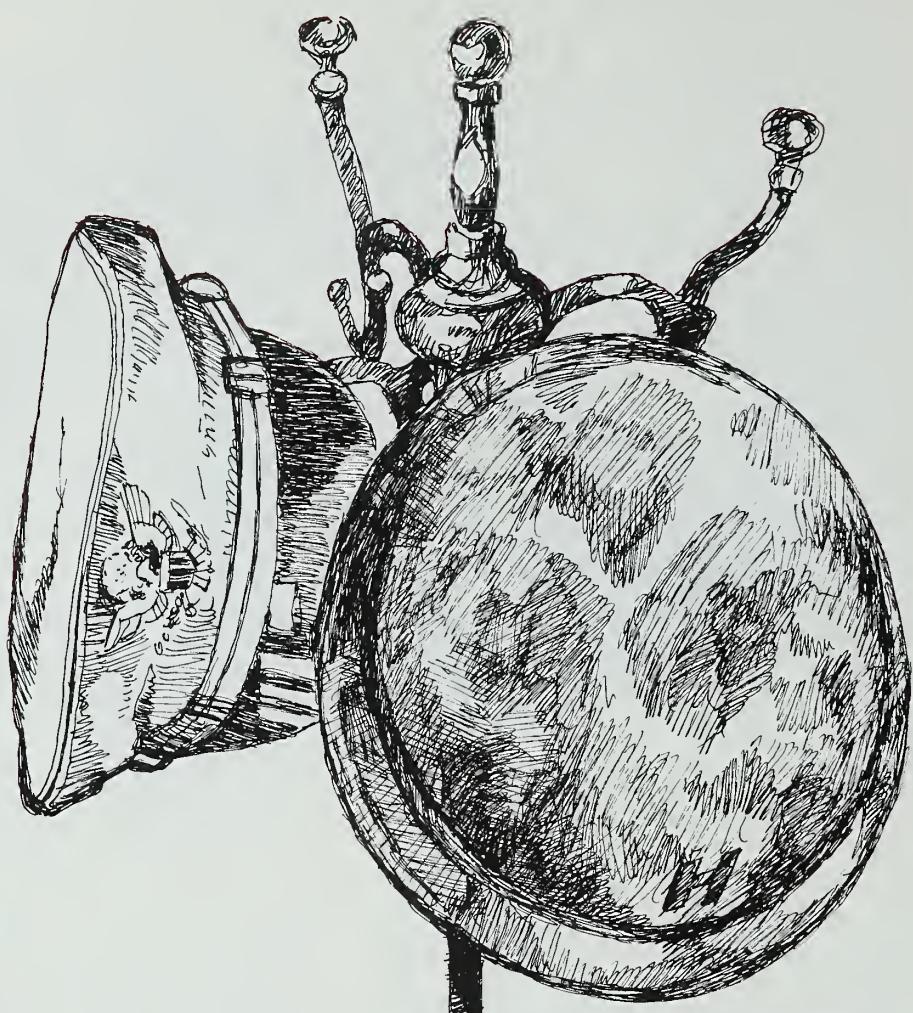
The concept of preparing to fight outnumbered and win "the first battle" on a sophisticated battlefield has been the Army's training orientation in recent years. U.S. Infantrymen can realistically expect to go into battle outnumbered and, on a weapon-for-weapon basis, outgunned. To the individual Infantryman, this means that he must develop two basic skills to a high degree: The

ability to survive in a very lethal environment and the power to inflict heavy damage on his opponent. In other words, he will be the better trained and the better equipped soldier on the battlefield.

Previous wars have shown how unexpected changes or new developments can determine tactics and strategy. The Infantry must be open-minded and innovative enough to take full advantage of those changes. It must also be farsighted and imaginative so that its doctrinal concepts can direct the development of the weapons and equipment it needs. Each organization must be considered a means to an end rather than an end in itself. Sound structure may be a prerequisite to an organization's health, but it is not health itself. What matters is not the brevity, the clarity, or the perfection of the organization, it is the performance of the people within that organization.

The Infantryman must be prepared to support the national strategy in the face of any future threat. As the most flexible, adaptable, and strategically deployable of the combat arms, we must be prepared to respond to the demands of present and future military operations.

The legacy for the Infantry of tomorrow is directly dependent on the efforts that are expended today. A strong foundation has been firmly implanted, but the changing scene can quickly outpace us unless we stay ahead of the changes. The Infantry Strategic Plan provides a framework that links our daily decisions into a coherent plan for the future.



COMMANDER
IN CHARGE
GARIBOLDI

CAPTAIN ROBERT L. MAGINNIS

Commanding a company anywhere in the world today is challenging, but commanding a mechanized infantry company in Europe is especially so. In fact, this command may be the most challenging company-level job in the Army. It is important for the prospective commander of such a company to understand the special challenge and to take some steps that will prepare him to meet it.

There are essentially two differences between this type of command in Europe and the same job somewhere else. First, in the U.S. Army, Europe (USAREUR), there is the ever-present General Defense Plan (GDP), which dictates almost everything the commander does — how he trains, where he spends his time, how he equips his unit, and how he organizes. As his soldiers are constantly reminded, their mission is to be ready to fight at a moment's notice.

But the second major difference, Europe's unparalleled high-stress environment, makes it difficult for him to accomplish the requirements of the GDP. This means that although the commander must train his unit to fight at a moment's notice, he may not always have the resources he needs to accomplish that training.

A mechanized infantry company commander in Europe has to vie with other U.S. and NATO units for access to training areas — either maneuver right areas (MRAs), which are civilian sectors where off-the-road maneuver has been authorized by the German government, or local training areas (LTAs). With the exception of the annual REFORGER exercise, during which USAREUR units, on a rotating system, are given the opportunity to take part in cross-country maneuver, such training is too often curtailed or cancelled because of the prospects of maneuver damage.

Competition for live fire ranges is often even more frustrating than vying for MRA and LTA opportunities. The shortage of ranges is further complicated by the same training ammunition problems found in the rest of the Army. Then, when a commander does get access to the ranges he needs, he has to hope that the weather cooperates so that he can accomplish at least his unit's mandatory tasks.

A broad spectrum of administrative burdens, in addition to the usual ones, also go with the job in Europe. A major source of these additional burdens is the commander's role as monitor of most of the Army-supported needs of his soldiers and their families. He has to arbitrate problems that arise between his soldiers and the local nationals, beginning with those associated with landlords. The unsuspecting company commander often feels helpless when confronted with the structured German bureaucratic system, which pervades essentially all aspects of his unit's life.

The commander is even responsible for monitoring the registration of privately-owned vehicles, the issuance of driver's licenses, and the administration of punishment for both on- and off-post traffic violations. Periodically, he is called upon to inspect the off-post quarters of company personnel, to quell domestic disturbances in

both government and economy quarters, and, frequently, to coordinate the cleaning and maintenance of government quarters. At the same time he is expected to support different community organizations such as dependent youth activities, scouts, chapel, German-American Club, Red Cross, and Army Community Service.

Another thing that makes this a high-stress assignment is personnel turbulence. First-term soldiers rotate every 18 months. By the time they in-process, go through weeks of the Headstart Program and other classes peculiar to USAREUR, participate in a major FTX, fire one or two densities at Baumholder, Grafenwoehler or Wildflecken, and take a well-deserved leave, it is almost time for them to start out-processing. Most of the noncommissioned officers as well are on two-year unaccompanied tours. When these short term tours are coupled with the numerous special duty requirements, the commander ends up with skeleton crews and inadequately prepared soldiers.

(Although the turbulence in Korea is worse, the environment there provides a major advantage in that almost everyone in the 2d Division is unaccompanied. In addition, the individual soldiers live in the remote camps with no POVs, and the training resources far exceed what is customarily available to the mechanized infantry company commander in Europe.)

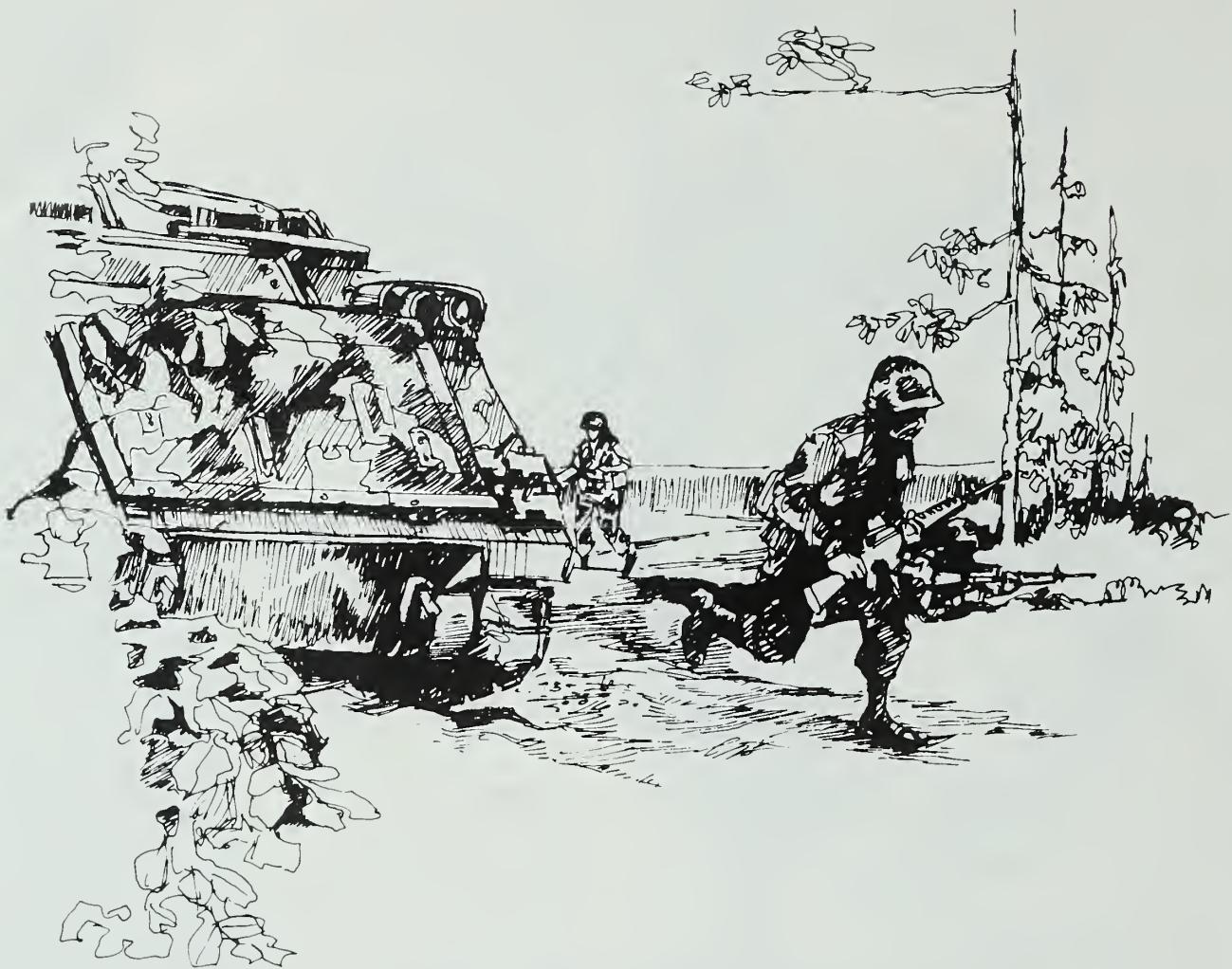
The extended support environment also makes things difficult. Most of the combat units in USAREUR are separated into numerous small casernes, or installations, scattered throughout Germany. This often means that routine maintenance and administrative actions must be performed at more than one location, usually several traveling hours apart. Simple repairs and administrative actions often turn into day-long operations, and if something can go wrong it will; if someone forgets to take along a vital tool or piece of equipment, it often means trying again another day to accomplish the task.

These are some of the things a mechanized infantry company commander in Germany has to live with. But there are some steps he can take to make it easier. The following advice, from someone who has been there, includes suggestions on how an officer can prepare himself for the job and then on how he can succeed at it once he is there.

ADVANCED COURSE

The first thing a prospective mechanized infantry company commander should do is to resist the temptation to take a command before he has attended the Infantry Officer's Advanced Course. Too often a young and aspiring, but still inexperienced, lieutenant grabs the opportunity for a USAREUR command without fully realizing what he will be missing by not attending the advanced course first.

Specifically, he will be missing the hours of advanced course training on combined arms, maintenance



management, supply accountability, and the Battalion Training Management System, among other subjects.

So, in preparation for a command later on, he should attend the advanced course and immerse himself in combined arms planning, digging deep and studying barrier planning, combat communications, and the use of close air support and attack helicopters. He should become an expert in understanding and writing operations orders and fragmentary orders. And he should not neglect the force modernization classes that will acquaint him with the many combat systems scheduled for USAREUR units as a part of Division 86.

He should also become knowledgeable in maintenance procedures by getting his hands dirty while pulling an engine, changing a track, and performing a preventive maintenance check list. He should do an operator's checklist for the ITV, learn how to schedule Qs, check parts requisitions and driver qualifications.

Once he is assigned to USAREUR, and before he takes command, he should persuade his battalion commander to schedule him for the pre-command course at the 7th Army Training Center. This two-week course can put the finishing touches on his pre-command education.

In addition to educating himself, the prospective

commander should also prepare himself to cope physically and emotionally. In Europe he is not likely to be making a lot of long road marches with a 50-pound rucksack, but he should not be fooled by the mechanized infantry "rider's" mentality.

Mechanized infantry soldiers require a different type of conditioning than do light infantrymen. They need to train their bodies to do heavy lifting over extended periods of time. Too, mechanized infantry soldiers need to be prepared to lift box after box of ammunition into their vehicles while suited in full MOPP protective gear.

USAREUR is no picnic physically. What a commander needs most is stamina, because his command will involve long hours and a hectic pace, with a lot of time spent away from the garrison and his troops and a lot of hours catching up when he returns to his office.

Precisely because of the hectic schedule and long hours, a part of the emotional preparation for this kind of command has to do with the commander's family, if he is married. He should understand the importance of this from the start and he should prepare his wife and children for his extended absences as well as for their own problems of living in a foreign country. (Planning ahead for trips and tours can help.) If he fails in this regard it

will only add to the stress of his job.

SUPPORT AGENCIES

As early as possible, the commander should get to know the support agencies he will be working with, because he will need them to help him solve many problems.

He should become familiar with the Criminal Investigation Division (CID) and the provost marshal's office. Riding with a military police patrol on a payday, for example, will teach him a lot; it will enable him to become acquainted with trouble spots so he can brief his new soldiers on what to avoid. A couple of days of self-guided orientation through local support agencies and some time getting acquainted with service agencies such as the Red Cross emergency message service and Military Airlift Command (MAC) service will save him time later when he needs them.

He should also visit his tour and travel center to find out what tours might lure the "barracks rats" out into the sunshine. He might also want to consider arranging a company tour to Paris, Rome, or London over the Christmas holidays.

The final step in the preparation process is by far the most difficult — trying to learn to read people. It requires almost a sixth sense, and some people never learn it. But it helps if he can become astute at discerning his boss's goals for the battalion — his prejudices and the things he feels strongly about.

Reading his subordinates is just as important. To get his job done he must be able to influence them to tackle their jobs with enthusiasm and determination. Getting the most out of key subordinates is often the difference between being a good commander and being an outstanding one.

These preparatory steps out of the way, and knowing what he is facing, the commander can start considering how he is going to go about commanding the company.

First, he has to set priorities on his time. Because he will be away from garrison at least 25 percent of the time, he cannot afford to waste what is left. He should develop a garrison schedule, designating certain times for administration, and then follow it. And he must not waste time on training that is not related to the GDP.

Next, the commander must organize his team. His soldiers must know their own jobs and how those jobs fit into the team. It is up to the commander to define the roles of his subordinates, trying to focus on individual interests and talents in the process, and this involves spending enough time with the men to be able to make the proper decisions. Once the team has been formed, the commander must provide clear direction for its members as he approaches the routine and the not so routine tasks — that is, AGIs, ARTEPs, and so on.

These subordinates must also be trained to do the jobs they are supposed to do, and it is up to the commander to provide the required instruction. One technique for giving

them the necessary know-how is to encourage his subordinates to take advantage of each professional learning experience. Effective after-action reviews can be excellent tools for bringing out lessons learned and the best ways to alter individual or team behavior. The altered behavior should then be reinforced through repetition.

This learning and team-building technique should be aimed at preparing subordinates for their next step up the chain of command. These techniques can be supplemented with company-level professional development classes that contribute to professional creditability — maintenance training, for instance, tactical exercises without troops, reviews of field SOPs, and war games.

All of these steps lead to the most important task of all — giving the soldiers in the company first-class training. The commander may not always be able to do all the training he would like to do, but what he does do, he should do well. He must not allow the constraints of the environment to become an excuse for poor training.

What he should try to do, as a company commander anywhere should, is to plan thoroughly and then execute the plan professionally. Too often USAREUR training, amid all the turbulence, is well planned but improperly executed because of limited resources and general discouragement.

But a commander cannot afford to waste scarce resources on poorly planned or poorly executed training. A failure to plan properly can lead to meaningless training; a failure to execute properly is poor testimony to professionalism.

Success in command is often considered in terms of survival. Any commander who has common sense, keeps



things in perspective, and stays flexible can survive company command in Europe. But survival should not be the goal; and survival in itself is not success by any measure. Success is achieved through a positive attitude that is focused on several points:

First, the commander should remember that his company is not an insular unit, that it must work in concert with its sister units. This means that, in regard to the GDP, he must continue to update his plan, always conscious of his assets and liabilities and of the fluid planning process. He must ask: Where does my unit fit into the battalion, brigade, or division plan? How and from where will my unit be resupplied? Such questions will help him and his subordinates focus on the common goal of being combat ready.

Next, to earn the respect and the confidence of the men, the commander must be knowledgeable in all aspects of his command. His soldiers expect him to be the resident expert in combat arms and company administration and they assume that he is, unless he proves otherwise. When he makes a mistake, he should admit it and correct it. His soldiers will respect him for it.

But nobody really expects him to be a superman and he should not try to be one. He should, therefore, learn to delegate authority and responsibility to his subordinates, then check periodically to make sure they are doing the job the way he wants it done. He should not give them more responsibility than they can reasonably handle, but what he does give them he should demand that they take seriously and that they learn accordingly. Frequent counseling sessions can be used to guide their progress.

Finally, the commander should encourage feedback from his subordinates and listen with a discriminating ear. More often than not, they, especially the senior non-commissioned officers, have been down the same path before and may know a better way to accomplish the mission.

EVALUATION

Even if a commander does all these things, survives, and succeeds to some degree, how does he measure his success? There are several ways, some more objective than others.

One of the most important measures of success is his satisfaction with his own performance. He might ask himself whether he accomplished what he had in mind to accomplish, whether he attained his pre-command goals, and whether his soldiers seem happy in the unit. A good measure of the soldiers' satisfaction is whether they are re-enlisting for the same MOS or for their present duty assignments. Another is how much or how little they complain or how willing they are to go the extra mile when something needs to be done.

Another measure is the degree of maturity the commander has attained during his command. He might ask himself: Am I better able to do my job now than I was at the beginning? Are my key subordinates more able than

they were at first? How did my soldiers perform on their SQT? Maturity is learning; if the commander can articulate what he has learned during the course of his command, then the chances are pretty good that, on this point at least, he has succeeded.

A third measure of success is unit discipline, because it is a reflection of the commander's performance. Unfortunately, a unit's track record is often a matter of public record, especially when the name of one of its soldiers appears on the morning blotter too often. The number of Article 15s, chapters, and courts-martial the commander has administered or requested also has some bearing on how he and his unit are perceived.

Next is what do his soldiers look like? Are they known for sharp haircuts, military courtesy, and good-looking uniforms? At sporting events, are company teams supported by other soldiers from the company? All of these are indicators of unit esprit and discipline. Soldiers who know their own limits, their commander's expectations, and their own roles on the team will generally represent the unit well.

One of the subjective evaluations of a commander's performance is announced at the conclusion of each ARTEP or AGI. These evaluations provide feedback on how well he has prepared his subordinate leaders for their jobs. But there are less formal evaluations that are often better indicators of success: Do soldiers from other units frequently try to join the company? Does the unit have good reaction time, and are the men thorough in conducting the company's readiness tests? How long does it take the company to load its tracks, empty the supply and arms rooms, and begin to move? If it improves each time, that is a positive indicator.

Finally, there are the tangible measures of success, such as early promotions, awards, and decorations, but these are scarce. The best criterion of success is the commander's own satisfaction with the job he has done, because he is usually his own harshest critic.

But despite all the special frustrations associated with command in Europe, it is still the best and most rewarding command environment. Any mechanized infantry commander who goes into the job knowing what to expect and who approaches the job with enthusiasm, common sense, and a sincere desire to do his best, will have a good chance of living up to his own high expectations.



CAPTAIN ROBERT L. MAGINNIS, now attending the Naval Postgraduate School, was formerly assigned to the 8th Infantry Division where he served in S3 and G3 assignments and commanded a combat support company. He is a 1973 graduate of the U.S. Military Academy and has completed several military courses, including the Airborne, Ranger, ITV Trainer, and Field Artillery Officer Advanced Courses.

THE COMMANDER- ATTORNEY RELATIONSHIP

MAJOR DANFORD F. CARROLL
CAPTAIN RITA R. CARROLL



One of the most important things an Infantry company, battalion, or non-separate brigade commander can do is to cultivate a good working relationship with the staff officers at higher headquarters. And nowhere is this sort of relationship more important for him than when he must deal with military criminal law. Because he does not normally have an attorney on his staff, he must turn to the staff of a higher commander for legal advice and for technical assistance in carrying out his criminal law responsibilities.

When he does this, he creates a commander-attorney relationship, which is probably unique among command and staff relationships. For the attorney, the effectiveness of this relationship is central to the accomplishment of his duties. For the commander, the relationship may not be central, but it is critical if he is to carry out his most sensitive responsibilities.

Several aspects of the commander-attorney relationship make it different from other command and staff relationships. One is the unusual extent of the direct, personal contact between the attorney — a subordinate member of a division-level staff — and commanders at all of the subordinate levels. (How often does a company commander, for instance, get to speak with a division's assistant G1?)

Another difference is the nature of the staff work that is provided by the legal officer, for the attorney brings a specialized knowledge to the relationship that is usually outside the commander's training and experience.

LEGAL FRAMEWORK

Understanding the commander-attorney relationship begins with understanding its legal and organizational framework. The legal framework is provided by the Uniform Code of Military Justice (UCMJ) and by the Manual for Courts-Martial, whose provisions set out the commanders' responsibilities as well as those of the attorneys who work for them.

Company commanders must inquire into possible criminal misconduct, administer Article 15 punishment when appropriate, and forward charges when trial by court-martial appears appropriate. They have the authority to apprehend offenders when they have probable cause to believe an offense has been committed; they may order searches of the property of the soldiers who

belong to their commands; they have overall responsibility for maintaining law, order, and discipline within their units.

In addition to these same responsibilities, battalion and brigade commanders can convene summary and special courts-martial and Article 32 investigations. It is their duty also to provide command recommendations to the general court-martial convening authority (usually the division commander) concerning the disposition of bad conduct discharge (BCD) special and general court-martial cases, and discharges under Chapter 10, AR 635-200.

At company through brigade level, the law requires little judge advocate participation in criminal and disciplinary procedure, although a judge advocate has to review certain Article 15 appeals, and to participate in the trial if a special court-martial is convened.

Military justice at these levels, though, has become increasingly technical, and the procedures required tend to change rapidly. For example, commanders often find it useful to obtain the assistance of lawyers in determining whether a search is legally appropriate, in drafting specifications, in preparing the papers necessary for pre-trial confinement, and in deciding whether to offer Article 15 punishment. In addition, an Article 32 investigation, although normally conducted by an officer of the command, involves the participation of two or more attorneys, one as a government representative.

Many of these requirements for a lawyer to assist the commander mirror the right of accused soldiers to have legal counsel represent them. In reality, the commander who is offering Article 15 punishment in a legally or factually complex situation often needs legal advice as much as the accused soldier, who is guaranteed by regulation the right to legal advice.

ORGANIZATION

To meet the increased need for legal services, legal staffs have been expanded. A division's Office of the Staff Judge Advocate (SJA), for instance, once consisted of five attorneys and support personnel, but it now commonly consists of 15 to 25 judge advocates, depending on local augmentation.

Recently, the defense counsel system has been reorganized as the Army Trial Defense Service, an organization outside the local chain of command and responsible directly to Department of the Army. By custom and regulation, the division's SJA is the legal advisor to the commander on whose staff he serves, and to the command. Because he usually does not give legal advice directly to subordinate commanders, this task falls to his own subordinates within his office.

In Europe, for example, most general court-martial jurisdictions have decentralized branch offices, in effect providing mini-SJA offices at the brigade and military community levels. The officers-in-charge (OIC) of these offices, judge advocate captains or majors, are responsi-

ble for advising the commanders within their areas. Sub-units within an area may be the responsibility of particular attorneys in an office — if it is large enough to have more than one — or the OIC may retain the "advice" function.

At military installations in the United States, branch legal offices are rare, but the job of advising subordinate commanders is commonly delegated to particular judge advocates within a post or division SJA office.

PROBLEMS

If advice to commanders were the only service required of military attorneys, the commander-attorney relationship might be a simple one. But a significant amount of authority sometimes is delegated to attorneys by higher commanders, and unit regulations as well may require commanders to consult with an attorney. An example of this is the authority to approve pre-trial confinement, which in some organizations is delegated to the SJA. Another is the requirement that a commander inform his servicing legal center when he places an individual on restriction. Such a rule is actually useful in avoiding later problems in court, even though it may seem an unwarranted intrusion upon a command prerogative.

Much of this day-to-day involvement with the processing of military justice actions takes place before a case is referred to court and before the attorney enters the case as a duly appointed trial counsel. Sometimes this involvement gives the attorney the ego-satisfying feeling of having total responsibility for his cases and can bring him into conflict with the commander. He may feel like a prosecutor, a military version of a civilian district attorney, and often will actively seek to take control of the processing of court-martial cases at the earliest possible stage. To the extent that his freedom of action is limited by the commander's authority, he may chafe under the restrictions. At the same time, the commander may resent the intrusion of yet another staff section into his business. (On the other hand, he may feel glad to have one less worry.)

Sometimes there is an underlying tension between the commander and the attorney simply because each has a different orientation. It may be no more than a suspicion on the part of one that the other does not really understand the ramifications of certain courses of action, but occasionally it may erupt into open disagreement.

For example, the appropriate disposition of a criminal matter may evoke conflicting opinions. There will be no problem with a case in which a soldier who has been a source of trouble in the unit is caught committing an offense, and the case is clearcut. The commander and the attorney will probably agree to take the case to trial at a level appropriate to the seriousness of the offense. Problems arise, though, when a commander wants a case prosecuted but the judge advocate feels that there are serious problems with it. There may be an important civilian witness in the United States, for example, who is unwilling



ing to travel to a trial in Europe or Korea. Or perhaps the judge advocate believes some of the critical evidence will be suppressed because it was the fruit of an illegal search or an improperly taken confession.

From the commander's point of view, it is important to the discipline and morale of his unit that the offender be punished. At the very least, he feels the offender should go to trial. The judge advocate, on the other hand, may have difficulty understanding how unit discipline can be reinforced by taking a case to trial that is likely to result in an acquittal. (He also usually feels a strong personal stake in not "losing" prosecutions in court.)

Another example of possible conflict between an attorney and a commander is the case in which a soldier who, accused of a serious offense, is not a troublemaker but has a good record and the esteem of his supervisors. He may have participated in a larceny while drunk, or he may have "invested" in a drug-dealing scheme. If his commander sees him as a valuable member of the unit, he may not want to see him punished severely. The judge advocate, meanwhile, sees that an offense has been committed and that the case merits trial. (It is not unusual, by the way, in this sort of case for different commanders in the chain of command to disagree among themselves as to the appropriate disposition of the case.)

The difference in orientation also often becomes evident when a commander and the judge advocate evaluate a soldier's request for discharge for the good of the ser-

vice under the provisions of Chapter 10, AR 635-200. From the judge advocate's perspective, it is often in the interest of the government to approve such a request when the case has serious problems with proof or when there are difficult motions that can be made by the defense. But a commander, and particularly a unit commander, tends to view the soldier who is given such a discharge as someone who has "gotten over." He may forget that the soldier will be separated as a Private (E-1), probably with an other than honorable discharge, which will cost him most of his military and veteran's benefits. He may also overlook the fact that if the soldier is tried and acquitted he can return to the unit with no punishment at all.

If a commander believes that a Chapter 10 discharge constitutes little or no punishment, he may consider it an appropriate disposition for the previously good soldier who is now in serious trouble, because it avoids the possibility of a court-martial conviction. But the attorney, giving more weight to the consequences of such a discharge, may disagree. The genius of the system is that both of these viewpoints must be considered in reaching an appropriate decision.

The different duties judge advocate officers perform also create confusion. Not all judge advocates serve the same function. Furthermore, the judge advocate who ordinarily serves as the commander's legal advisor and trial counsel may on occasion be placed in a role in which he

cannot advise the commander. He may be handling a legal assistance problem (such as indebtedness) for a member of the command, for example, and as such he must pursue his client's interest without regard to the commander's position.

A commander ordinarily will be well aware that he should not seek criminal law advice from a judge advocate who is serving as a defense counsel. But when a defense counsel, acting as an advocate for his client, contacts a commander, the commander may not fully appreciate that the defense counsel is not acting as his advisor. Since the defense counsel's role is that of an advocate advancing the interest of his client, a commander should carefully evaluate matters submitted by the counsel and seek help from his own legal advisor.

Another type of difficulty arises because an attorney must rely on support from persons under the commander for tasks that make up a large part of the military criminal law process. The battalion legal clerk's performance, for example, can be critical to the outcome of a case. If he does not properly prepare the charge sheet, it will have to be redone, and time itself is a factor that might result in the dismissal of a case. The battalion legal clerk is sometimes responsible for transcribing the Article 32b investigation. If the transcription is unduly delayed, the case may be dismissed.

The conflict arises when the legal clerk's time is taken up with other duties. He is in the uncomfortable position of having the judge advocate tell him that one action takes priority while the adjutant or his commander directs him to do some other task. Accordingly, if he is to perform the functions required by military criminal law procedures, the battalion legal clerk must have the full support of his commander.

The same is true of the Article 32 investigating officer: The commander needs to impress upon him the importance of his assignment, and also must allow him the time he needs to perform the investigation properly.

Important improvements in the commander-attorney working relationship are coming about. Because of some changes in personnel policies for JAG officers, more experienced JAGC personnel are available to fill the important slots in the field. This should mean they will be more familiar with commanders and their problems, which, in turn, should improve their ability to assist the commanders.

Even with these changes, the responsibility still rests with commanders and judge advocates in the field to make the most of the commander-attorney relationship. Much has been made of the need for good personal interaction. New judge advocates in training at The Judge Advocate General's School, or in orientations given by more experienced attorneys, are often encouraged to join in the activities of the command — to attend social functions, to be present at field training, and to visit major training areas. These are important steps that judge advocates should take. Commanders can help by providing them with the opportunities.

Probably more important than this "getting to know you" activity, is the direct, personal interaction between commander and attorney concerning the business at hand. The reason for his mutual orientation and arrangement of priorities is simple: the commander-attorney relationship is *ad hoc*, and is less structured than the more traditional relations of commander-staff officer.

The judge advocate can do more to assist a commander than just process his cases and advise him concerning their disposition. They can help train his NCOs and officers in such subjects as search and seizure and apprehensions. The judge advocate and his staff can also be helpful in training the commander's legal clerks, especially in the common situation where the unit legal clerk lacks formal training in his MOS.

Whether bringing an attorney into the administration of criminal law at the unit level is desired, the system requires that commanders exercise their responsibilities knowledgeably and with a strong sense of the needs of their command. An understanding of their respective roles in the system, and a respect for the responsibilities and knowledge of the other participants in the military justice system, will create a stronger system.

MAJOR DANFORD F. CARROLL, now assigned as a staff attorney in the Office of the Judge Advocate General in Washington, D.C., previously served as trial counsel and Chief, Criminal Law Division, 3d Armored Division. He holds a law degree from the University of Texas.

CAPTAIN RITA R. CARROLL also holds a law degree from the University of Texas and also previously served as a trial counsel in the 3d Armored Division. She is now an appellate defense counsel in the U.S. Army Legal Services Agency, Falls Church, Virginia.





SELECTING LEADERS

GEORGE G. EDDY

Being able to assess the leadership ability of your subordinates is an important part of being a leader at any level. I found that out several years ago when I became the commander of a battalion in an armored division in Europe.

I inherited a going outfit complete with five companies, no two of which were in the same location, along with the usual set of company commanders, noncommissioned officers, and the like. I use "going" in the sense that the unit existed; where it was going was one of the things I would have to determine, and soon.

The battalion was about to undergo an IG inspection and what was then called a command materiel and maintenance inspection, reputedly a tough one. Additionally, my battalion was scheduled to furnish observers and umpires for another division's field exercise, which would just about wipe out the battalion staff and one company of officers and senior NCOs for about two weeks.

I suppose I should have taken some solace in the fact that no enemy was shooting at us and no tidal waves, earthquakes, or volcanic eruptions were approaching, even if it did feel like something of the sort. (As a matter of fact, my change of command ceremony had to be held indoors at the last minute because the sky seemed to turn upside down, unleashing a torrent. Perhaps that should have been an omen for me, but I was too busy with more pressing matters to wonder about it.)

To make matters worse, I knew no one in the battalion or the division, and when I did meet the division commander and the assistant division commander for support, their only advice was to "get with it," which I assured them I intended to do, and that was that.

As part of my preparation for this challenge — and I was to appreciate the full meaning of the word later — I did visit the battalion and my predecessor one Sunday afternoon shortly before he departed for another assignment. After he gave me a brief rundown on the battalion and its key personnel, he asked me if I had any questions. So I jumped at the chance to ask him what he thought were the major problems facing the battalion. When, after a long pause, he replied that he could not think of any, I knew I was in trouble — and I was.

My first task was to get acquainted with my new unit as quickly as possible and particularly to size up its key officers and NCOs, and I did not have much time. I had to call on all my prior experience in working with others to help me assess the strengths and shortcomings of those on whom I would have to depend for the battalion's overall performance. While I will not go into detail on exactly what I learned and what I did, let me say that what I found was extremely disturbing. Essentially, the battalion was under severe criticism, was floundering, regarded as jaded, and rife with tension and fear. Somehow I had to change this environment.

In my later reflections about this experience, I have tried to reanalyze the events and the actions — things I



tried that worked and those that did not. All in all, I think the outcome was more than satisfactory — my successes outnumbered the failures by a good margin. In such after-action contemplations, though, the usual question is: What would you do differently if you were in a position to do it again?

For one thing, if it had been possible, I would have preferred to choose my own unit commanders and senior NCOs, rather than just accepting those who were present when I arrived, and I would not have selected several who were there. (Since no two units were co-located, I did not have the option of moving them around from one unit to another until I found a better combination.)

TECHNIQUE

But assuming I could have chosen them, how would I have gone about it? Is there a technique available that is easy to use and that provides useful information to help in making a selection decision? I think there is — one that involves some, but certainly not all, of the critical ingredients.

The technique that I propose includes an initial interview, followed by asking each "candidate" to take the accompanying test.

A MATTER OF IDENTITY

In a military organization, there are five individuals: Tom Smith, Bill Houston, Barbara Jones, George Blankston, and Harry Brown. These five hold the following positions, but not

respectively: company commander, clerk-typist, first sergeant, mechanic, and drill sergeant. From the clues listed below, determine who occupies which position in the organization:

1. The clerk-typist bandaged the mechanic's finger when he cut it using the former's nail file.
2. While the company commander and the mechanic were out of town on a mission, the first sergeant put Blankston and Brown on report for leaving the area without authority.
3. The first sergeant was a sharp card player, and Smith admired his ability.
4. Brown invited the clerk-typist to lunch, but his invitation was not accepted.

This is a test that should take only a few minutes to finish. Try it and see for yourself. (The solution is presented farther along in the article). You may find it difficult or you may breeze right through it. In either case, you may be skeptical that anything so simple could reveal anything significant about leadership, but it does.

For one thing, I believe this test gives some insight into the method or technique each person uses to figure out the answers. As the applicants are working on it, you should walk around the room and observe just how they are going about it. All they have is one blank sheet of paper and a pen or pencil, but what they enter on that single sheet can tell you a lot.

Everyone in a position of leadership faces a seemingly endless parade of problems every day, and it is important for us to know what method a leader follows in trying to solve these problems. We should be interested in knowing whether he has the ability to separate fact from fiction, to differentiate between relevant and irrelevant facts, and to interpret the meanings and consequences of the facts. In

addition, a leader should be able to identify cause-and-effect relationships and should know the difference between a routine matter and an urgent one. He should know whether the means exist for him to carry out a decision and how much time he might need to do it.

Precisely how a person goes about making a decision is a matter of real concern, and although it is not necessary for everyone to use the same problem-solving approach, there ought to be some logic in whatever method each one uses. In this connection, we need to consider the part that assumptions play in this process. We all make assumptions, because it is easier than going out and gathering the data we need to approach the problem some other way. If we do go out and search for data, we must decide what facts are needed, and then where and how to acquire them. Then we have to study them, sort them, discard some, and interpret the meaning of the ones that are left. It is understandable, then, that we just make some assumptions and proceed from them. And there are occasions when assumptions are not only acceptable, but essential, but hurriedly conceived assumptions are dangerous and are the direct enemy of careful thought. (Few people would want to be tried in a court where the judge, at the opening moment of the trial, called out, "Bring the guilty man in!"")

Returning to the test itself, usually about 60 percent of the people tested fall into the assumptions trap, assuming that Barbara Jones has to be the clerk-typist. They then try to force-fit the remaining "facts."

Only a handful of people I have seen take the test will even try to set up a matrix and follow any systematic procedure. Most seem to use the pin-the-tail-on-the-donkey approach. As I go around the room looking at their papers, what I see most often is a mishmash of illegible scribblings, doodlings, erasures, mark-overs, and so on. Most seem content just to stab at it and hope for the best. Some, of course, don't even try, and others quit trying almost immediately.

What these observations reveal about the thought processes of the people is most significant if they are to be leaders — officers or NCOs. I believe that prospective leaders ought to be able to think clearly, concisely, and

SOLUTION

This test lends itself to a matrix approach, using the process of elimination as a basic technique. Of course, this technique will not apply to all problems, but the point is that some systematic way ought to be employed in analyzing each problem.

For this instrument, the matrix can be set up as indicated below. The order of the names is immaterial.

	Co Cdr	Clerk- Typist	First Sgt	Mech- anic	Drill Sgt
Barbara Jones			3	1	
Tom Smith			3		
Bill Houston					
George Blankston	2		2	2	
Harry Brown	2	4	2	2	

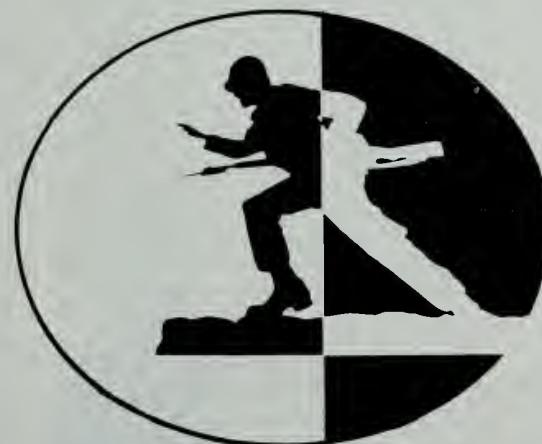
By placing the clue numbers in each column, we have shown that that particular position is eliminated as a possibility for that person. The first clue, for example, establishes that the mechanic is male, so Jones cannot be the mechanic. As each clue is entered in the appropriate columns, we eventually get to the discovery of the first match of name with position: With all other possibilities eliminated, Brown is revealed as the drill sergeant. Then by placing an X in the drill sergeant column next to the other names, Blankston is shown to be the clerk-typist, and so on until we see that Jones is the company commander, Smith, the mechanic, and Houston, the first sergeant.

logically. They must develop a mental discipline through extensive practice so that when they are confronted with a major emergency they can act decisively, because they are prepared. And given the tools with which to assess the abilities of the leaders under him, so is their commander.

I surely do not contend that this is all there is to the subject of leadership, for clearly there is a great deal more, and I certainly agree with others who hold that leadership is an "intriguing and beguiling phenomenon."



GEORGE G. EDDY, a retired Army colonel, is on the faculty of the University of Texas at Austin, from which he earned a doctorate in 1974. He has written numerous articles on leadership and management topics and a book on small businesses. His active military service included tours in Korea and Vietnam and one as a maintenance battalion commander in the 4th Armored Division.



TRAINING NOTES



Mortars in Mountains

MAJOR THOMAS H. WHITLEY

CAPTAIN CHARLES T.D. GENDRON

Mountains that are militarily significant cover about one-quarter of the world's land area. They are generally characterized by rugged, compartmented terrain with steep slopes and few natural or manmade lines of communication.

Historically, the focal point of mountain operations has been the battle to control the heights, and changes in weaponry and equipment have not altered this emphasis. Infantry mortars, with their light weight, simplicity, and versatility, remain the basic fire support element for units operating in mountainous terrain, and while they are immediately responsive to the infantry commander, he must understand how the severe environmental conditions can be expected to affect the capabilities of his mortar platoons. The following are some of the things he must consider.

First, in the mountains, fire support assets must be as mobile as the unit they are supporting. The M224 lightweight company mortar (LWCM) and the XM252 improved 81mm mortar (I-81) can be hand-car-

ried from position to position. The 4.2-inch mortar, though, can be used only in positions near main roads. Commanders should also consider that when mortars must be brought in by helicopters they will also probably require additional airlifts for ammunition resupply and for displacement. All these operations are completely dependent upon the extremes of weather, which must be taken into consideration, too.

Command and control is more decentralized in mountain operations, which means that mortar platoons must be able to operate separately in sections. Because of the compartmented terrain, it may even be necessary to give operational control of a single mortar squad to an infantry platoon. This means that each section and each gun crew must be trained to operate alone. Hipshooting procedures become extremely important in such operations.

When it comes to fire support, high explosive shells with point detonating fuzes are very effective on rocky ground, because they scatter stones, which themselves become projectiles.

Shells with proximity fuzes — except for the newer ones — are particularly effective on reverse slopes and in deep snow, but they lose their effectiveness when they are fired through dense clouds or falling snow. The new fuzes are not greatly affected by clouds or snow. Variable winds and steep mountain slopes do reduce the effectiveness of white phosphorous rounds.

Mortar fire is capable of reaching reverse slopes and neutralizing dead space. The 360-degree firing capability of mortars enables them to engage targets to the flanks and rear of their firing positions. Fire planning in mountains should also include narrow defiles used as routes of supply or routes of advance or withdrawal, along with any large masses of snow or rock that may be above enemy positions and supply routes. The possibility of avalanches or rock slides and their effects on the activities of friendly troops must be considered during the planning phase.

In mountainous terrain, mortar gunnery can be difficult because survey data is usually not available



Each section and each gun crew must be trained to operate alone.

and even when it is, it is likely to be exaggerated by the slope of the terrain. It takes practice to compute elevation changes accurately. Meteorological data is rarely useful because of the need to relocate the mortars within 10 kilometers of a METT station (in mountainous terrain) and because of the requirement for a valid registration. Shifting winds and changes in air pressure will have significant effects on mortar rounds. If the Mortar Fire Control Calculator (MFCC) is adopted, it will be of particular assistance to fire direction computers in the mountains.

Some of these same difficulties will also affect the observation of mortar fire. Additional observers will be required, and observation posts (OPs) generally should be emplaced on the highest available ground, although

low clouds or fog may require that they be located at lower elevations. In locating their FOs, commanders should remember that they themselves often use hilltops as registration points and usually include them as targets in a preplanned target list, and should expect that the enemy commanders will do the same. The use of observed, as opposed to unobserved, fires should be normal since

the rapidly changing meteorological conditions and the generally poor maps can decrease the accuracy of predicted fires.

The conditions encountered in mountainous terrain will have a significant effect on a unit's fire support, but the value of infantry mortars to commanders should not be overlooked. In fact, they may be the only fire support means available.



MAJOR THOMAS H. WHITLEY, when he prepared this article, was assigned to the Weapons, Gunnery, and Maintenance Department of the Infantry School. He holds a master's degree from Georgia State University, and his assignments include a tour in Vietnam and command of a combat support company.



CAPTAIN CHARLES T.D. GENDRON was commissioned from the Officer Candidate School in 1975 and has completed the Infantry Officer Advanced Course and the Infantry Mortar Platoon Course. He has served as a fire direction computer and as a heavy mortar platoon leader.

What Comes First?

CAPTAIN KENNETH A. SIEGEL

Way back, say around the time of Sargon the Great, when foot soldiers got the idea of hooking up some rather wild horses to a wheeled vehicle and then trusting their scantily clad bodies on it, the argument began — which comes first, the vehicle or the man? Through the ages — from chariot to elephant howdah, to Hussite wagon, to combat car, to halftrack, to armored personnel carrier, to Bradley Infantry Fighting Vehicle (BIFV) — the argument has continued.

And the argument is the same today — what about the mechanized infantryman? Is his vehicle first and foremost a fighting vehicle, or is it chiefly a means of getting him to the fight? One might think that the development of the BIFV would have settled that issue firmly in favor of the fighting vehicle concept, that the mechanized infantryman is first and foremost a mounted warrior who happens to have, in addition, the vital but only secondary ability to do his thing on foot.

Aha, say the dedicated mobile warriors, this is indeed the way to go. But there are others, the dedicated grunts, who say phooey and balderdash, that it is, instead, the way to instant mass incineration.

So where is the middle ground? What is the doctrine? How do we train the soldiers in our mechanized infantry units? What do we emphasize? And who decides what is most important? Is it being able to move and fight mounted in support of

tanks as part of the combined arms team, or being able to perform all the functions of the infantryman, or being able to do both equally well?

Ideally, of course, the answer is the last of these — being able to do both equally well. But how do we do that, given the problems we always have



with time, fuel, ammunition, replacements, and such?

In trying to answer that question, mechanized infantry units such as my National Guard company have had to take several things into consideration:

First, a mechanized infantry company has as its maneuver element three platoons. Each has four full-tracked vehicles — currently these are

M113A somethings, soon BIFVs (please Lord, very soon). These twelve vehicles, complete with weapons, communication systems, and great mobility, are the guts of the unit; they enable it to perform its mission.

The weapons platoon and company headquarters function pretty much the same as in a regular infantry company except that their mortars and TOWs are more mobile and their maintenance section is bigger and also more mobile.

The final consideration is that the mechanized platoons must be able to work with tanks as part of a combined arms team. This means they must

- Keep up.
- Enjoy somewhat similar protection.
- Be close enough to protect the tanks from enemy infantry.
- Be able to influence the battle by using weapons and maneuver.
- Be able to dismount to clear obstacles, dug-in positions and built-up areas, and to conduct patrols.

Note what comes last in this list of considerations — dismounted operations. The point is that if a mechanized platoon can properly man all its vehicles and weapons, it can perform the bulk of its missions. If a mechanized platoon can do an absolutely amazing imitation of a badger and build the finest defensive position in the world in twenty minutes, perform patrols that would put the Ranger School to shame, and slosh through swamp and thicket in

	3 men	4 men	5 men	6 men	7 men	8 men, 9 men, 10 men
Sqd Idr	*M203/Dragon gnr	*M60 MG gnr	*M203	*M16	*M16	*M16
Car tm Idr	.50 Cal MG gnr					
Driver	M203	M16	M16	M16	M16	M16
Tm Idr		*M203/Dragon gnr	*M60 MG gnr	*M203	*M203	*M16/bipod
AR man			*M203/Dragon gnr	*M60 MG gnr	*M60 MG gnr	*M60 MG gnr
AR man				*M203/Dragon gnr	*M16/bipod	*M16/bipod
Grenadier					*M203/Dragon gnr	*M203/Dragon gnr
Grenadier						*M16/Dragon gnr
Rifleman						*M16/Dragon gnr
Rifleman						

absolute silence, but is weak on what makes the M113 or BIFV tick, it is a flat failure.

So, after going through this list of considerations, my company came to a decision on where the emphasis should be placed and at the same time came up with a method of training to support that decision.

We stress mounted operations, mounted maintenance, mounted marksmanship, mounted tactics, mounted everything, first, second and third. We always make sure the best people we have in the platoons — after the platoon leaders and platoon sergeants — are the assistant platoon sergeants (the platoon leaders' carrier commanders), the other carrier team leaders, and the drivers. No soldier gets to be a squad leader if he cannot perform as a carrier team leader.

The result is that despite extra details, understrength squads (the Reserve Components and the regulars suffer equally in this regard), and personnel off hither and yon, we can still field four carriers per platoon and do most of the missions that a mechanized unit has to be able to do. If we have to go out with a platoon of only twelve men, we can still field four carriers, man four .50 caliber machineguns and three Dragons, and have the M60s sitting inside ready for use — and we can still work with tanks. We can dismount a fire team, if we must, to do some of the dismounted work that may be necessary and still keep two men in each carrier.

Training this way also guarantees that our platoon leaders, platoon sergeants, assistant platoon sergeants, and squad leaders get experience in performing the most im-

portant of their tasks whether they are doubling as carrier team leaders or actually leading squads. It also lets the company commander get experience in handling all his vehicles, which he needs as badly as anyone.

PRIORITIES

We use the accompanying chart of priorities in preparing for training. It shows the order of manning, including who carries which weapon. The chart runs from three men to ten, the most we are authorized, given the MTOE we operate under in the National Guard. Expanding it to eleven or twelve men would be simple enough but probably unnecessary given the reduction in squad strength that comes with the arrival of the BIFV. (An asterisk beside a position means that the soldier can also be part of a dismounted team.)

The Dragon may be assigned to any one of four men in the 8-, 9-, or 10-man squad, and in that squad, an M203 man is left with the carrier. (On the rare occasions when a squad has only one or two members available for training, these men are assigned to the squad with the next larger strength.)

Each squad, regardless of its size, always carries the full equipment authorized for the carrier and the squad. This includes pioneer tools as well as NBC, communication, and maintenance equipment.

We charge the assistant platoon sergeants with the responsibility for training the drivers. They work closely with the maintenance sergeant to see that the carriers are as ready as

possible. Each driver and carrier team leader, in turn, cross-trains with our track vehicle mechanics.

I use my own carrier both as a mobile command post and as a maintenance contact team, and keep the communication repairman and a track mechanic on board. This avoids the unnecessary dispatch of our M578 and lets the recovery team concentrate on training for and performing recovery operations.

Every man in the company, regardless of his MOS, learns to drive and maintain the M113 vehicle. We believe that if we're down to the supply sergeant, the company clerk, and the cook's helper, they'll be in an M113 manning a .50 and a Dragon and looking for a tank to work with. (Even our mess section has placed first in a competitive .50 caliber machinegun crew drill event that we run often.)

Essentially, our choice is weighted heavily in favor of mounted operations, with infantry tactics coming second. The day — and may it never come — when we revert to foot infantry, we'll pounce on all the wonderful and esoteric niceties of being grunts. Meanwhile, we'll use our limited time to prepare for what is most important — being part of the combined arms team.

CAPTAIN KENNETH A. SIEGEL, when he prepared this article, was a company commander in the 2d Battalion, 181st Infantry (Mechanized), Massachusetts Army National Guard. He is a 1972 graduate of Roanoke College and also holds a master's degree from Columbia University. He graduated from the Infantry Officer Advanced Course in 1975.

FDC Skills

CHARLES HARVEY

Suppose you have the responsibility for selecting a new soldier for training as a fire direction computer (FDC) for your unit. What information would you want that might help you in making your decision? You would want someone with keen eyesight and steady nerves, of course, but you would want someone with good mathematical ability, too. After all, a good bit of adding, subtracting, multiplying, and dividing is involved in measuring shifts right or left and in bracketing a target. Gross errors in these calculations could result in having the rounds come in where you don't expect them. Your indirect fire could be ineffective, or friendly troops could be killed or equipment destroyed.

Wouldn't it be helpful to have some indication of a soldier's math ability and the extent to which he has sharpened his math skills? Some time ago the Evaluation and Standardization Division of the Infantry School recognized this need and developed a math skills diagnostic test to give a field commander an idea of the knowledge each soldier he gets in his unit has.

The test is a 22-item quiz. It includes sample math problems requiring the soldier to add and subtract whole numbers, decimals, and fractions; multiply and divide decimals; add positive and negative numbers; and figure averages. There are no

trick questions, nor do they require much reading.

The instructions simply tell the soldier what to do with the numbers given. He may have to align the numbers in columns or convert a whole number to a fraction before he adds or subtracts, but these are math skills that are basic to any sort of calculation. For example, when he is told to "average" a column of figures, he is given only the figures. There is no explanation of what it means to average a group of numbers. He must already know that. There are no word problems on the test presently, but thought is being given to including a problem phrased just as it would be given to an FDC to see whether the soldier has any idea of the calculations he should make to adjust the indirect fire properly.

CORRELATIONS

Once the math test was developed, it was administered to a sample of MOS 11C soldiers in the ranks of private first class to sergeant first class/platoon sergeant who had recently taken the SQT. When selected hands-on and written test scores were correlated with the math test scores, correlations indicated a good relationship between a soldier's mathematical ability and his SQT results. A 10-item rater's criterion for

FDC job performance was developed to establish a cut-off point and a GO/NO GO score. Fifty soldiers who were qualified in MOS 11C took the math test and each was rated by his fire direction chief, or equivalent, and his mortar platoon leader. Again, the correlations were significant, and the cut-off score was set at 14 correct out of the 22 items.

During One-Station Unit Training (OSUT) at Fort Benning, all MOS 11X (Infantry unassigned) and MOS 11C (Indirect Fire Crewman) soldiers are now being given the test. (In a recent six-month period, 6,650 soldiers were tested and only 3,597 scored 14 or higher.) Each soldier's test score is given to his OSUT company commander for use in his initial entry training. The score is also recorded in Item 27 of the soldier's DA Form 2-1, Personnel Qualification Record — Part II, for use by the gaining commander when the soldier reports to his unit. It is shown as "Math ___," indicating the raw score he made on the test.

The U.S. Army Forces Command (FORSCOM), in a recent study, discovered that the high attrition rate in the Basic Noncommissioned Officer Course (BNCO) classes was closely related to the soldiers' lack of skills in mathematics. As a result, an NCOES preparation project has been initiated in which the math skills diagnostic test will be administered to

potential BNCOC students before their final selection. If a soldier cannot show a satisfactory level of understanding and skill in the basic mathematical processes, he will be given help through the Basic Skills Education Program (BSEP). Once he has improved his grasp of the mathematical skills, the soldier then can be reconsidered for BNCOC. This should alleviate the attrition problem in the course.

Although science and technology have given us smaller, hand-held computers that can do complex calculations in split seconds, the human operator still needs to have a basic understanding of the mathematical concepts to operate them. And there will inevitably be emergen-

cies when the FDC must revert to using his own brain and a stubby pencil. When that happens, he needs to know how and when to add, subtract, multiply, and divide. If he can score 14 out of the possible 22 on the test, he has the potential for FDC training. Of course, the higher his score, the better the probability that he will succeed.

Used in combination with other factors, the math score can be of value to a commander in making his selection of soldiers for FDC training. He should choose the soldier who can do the right mathematical calculation with the highest degree of accuracy for such an important job.

So the next time you plan to conduct FDC training in your unit, check

Item 27 of the soldier's DA Form 2-1 to see what his score was on this test. If it was at least 14, check out his other desirable characteristics for the job. His keen eyesight, depth perception, and steady nerves may make him your first choice for FDC training, but if you don't also check his math ability you could find that assigning him to adjust indirect fire could be hazardous to his health — and to yours.

CHARLES HARVEY is assigned to the Evaluation and Standardization Division of the Office of Infantry Force Management at the Infantry School. He holds bachelor's and master's degrees from Georgia State University, and is the author of "Pound Foolish?" which appeared in the September-October 1979 issue of INFANTRY.



ENLISTED CAREER NOTES



OMPFS TO NEW SSGs

MILPERCEN's Enlisted Records and Evaluation Center at Fort Benjamin Harrison, Indiana, has begun mailing to each newly promoted SSG/SP6 a copy of his Official Military Personnel File (OMPf) about 90 days after his promotion.

The idea is to introduce these newly promoted NCOs to the centralized promotion concept. Having their OMPFs early will give them time to review and update their files well before they become eligible for promotion to SFC/PSG or for selection to attend NCOES.

These soldiers will also be told that their next promotion or school selection will be under the centralized promotion system. They will be instructed to review their OMPFs and take them to their servicing MILPOs for updating.

This procedure is an effort to bring soldiers and their MILPOs together to make both aware of the centralized selection process, and it should lead to more accurate and up-to-date OMPFs.

ENLISTED LINGUISTS

The Army needs linguists in Career Management Fields 98 and 96, and this need is expected to continue to grow as new Combat Electronic Warfare Intelligence (CEWI) battalions are deployed.

To meet the need for better management of enlisted linguists, the Language and Civilian Education Branch of MILPERCEN's Enlisted Personnel Management Directorate was created last year. It is responsible for the overall management of enlisted linguists, for projecting future requirements for training

linguists, and for distributing linguists according to the Army's priorities.

To determine how many soldiers the Army must enlist and train to meet future requirements for specific languages in MOS 98G and 98C, a computer model was developed. The model was used for the first time earlier this year to project training requirements for fiscal years 1983 and 1984. It considers the Army's future needs, attrition from basic and advanced individual training and language school, and reenlistment losses. The use of the model better matches requirements and operating strength.

The branch, in conjunction with the Defense Language Institute (DLI), uses the Quota Management System (QMS) of the Army Training Requirements and Resources System (ATRRS). ATRRS allows the names, class numbers, and starting and completion dates of students who attend DLI to be entered into a computer terminal. This information is immediately available to DLI.

The system will also be used to keep track of students throughout their instruction at DLI. It will give the branch immediate information on class fill rates, student recycles, failures, and graduations.

The branch has also refined the procedure used to count enlisted linguists. In the past, linguists who spoke more than one language were counted in each of these languages. To solve this problem, a control language — the one the Army most needs — is developed for each multilingual and each is counted only in his control language, which is recorded on both the Enlisted Linguist File and the Enlisted Master File.

Using the control language concept, the branch can still count

linguists in the other languages they speak, which may be needed to support future Army requirements.

Another important aspect of linguist management is keeping up-to-date records on the proficiency of each linguist. To determine proficiency, the local Test Control Officer administers the Defense Language Proficiency Test (DLPT), which linguists must take every two years to stay current. The score and test date are sent to the branch and recorded on the Enlisted Linguist File.

NCO OE CONSULTANTS NEEDED

A demand for NCO organizational effectiveness (OE) consultants is projected for calendar year 1983 and beyond, as the Army's force modernization program gets into full swing. Openings are expected at most CONUS installations.

NCOs are eligible to enter the voluntary program if they are in the ranks of SFC/PSG through SGM/CSM, with waivers possible for highly qualified SSG/SP6s. They must have 10 years of service, including troop duty, at least two years of college, and an otherwise exceptional record.

The applicants who are selected will attend 16 weeks of training in OE techniques at the U.S. Army Organizational Effectiveness Center and School at Fort Ord, California.

Further details can be found in AR 5-15, and interested NCOs are invited to contact their local OE consultant or military personnel office for guidance. Applications should be submitted through command channels to MILPERCEN, ATTN: DAPC-EPZ-O, 200 Stovall Street, Alexandria, VA 22332.

OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

I leave the position of Infantry Branch Chief with a solid feeling that in the past 18 months we at Branch have strengthened our relationship with you, the field officers. For the most part, we have reconciled your professional desires with the overriding consideration, the needs of the Army.

I have traveled throughout the world to discuss with you the functions of branch and the processes involved in promotion and selection for military and civil schooling. I am somewhat concerned that the missions and functions of Infantry Branch are misunderstood by many of our 11,500 Infantry officers and would like to clarify some points.

First, of course, Army requirements dictate assignment practices. Infantry Branch only reacts to the priorities stated by DCSOPS and communicated to MILPERCEN by DCSPER. Second and most important, we do not become involved in the promotion board process, and we are not involved in the selection process for CGSC and SSC. In fact, we receive the selection lists the same day your commander gets his. And we do not conduct any "screening" boards.

A major function we do have is to assist you in preparing your records for the various boards. We can help you update your Officer Record Brief (ORB) and your official Performance Fiche (P-fiche), which are the two documents that represent you before any selection board.

Your P-fiche contains your official photograph and copies of your Officer Efficiency Reports (OERs). Close-out OERs that arrive at MILPERCEN after the P-fiche is drawn from the files (45 to 60 days before a board convenes) usually will

appear before the board in "hard-paper" copy, and we can help you get an updated record before the board. But you must call your assignment officer and request assistance. We also may call you or your commander to obtain information for the President of the Board, normally only at his request. Information that frequently must be verified includes height, weight, awards, and decorations.

An important change during my tenure here has been the switch of proponency for Infantry personnel force management to the U.S. Army Infantry Center (USAIC). An update on all issues was conducted in June 1982 at the first anniversary of the change in proponency. USAIC is now working on issues pertaining to Infantry Officer Professional Development.

We at Branch will also put together for USAIC the 1983 edition of the Infantry Branch newsletter, which will be available in January 1983. In it, we will spell out our tasks as we see them for 1983, and it will contain dates for selection and promotion boards and a by-name telephone listing of our assignment officers at Branch.

Finally, I sincerely want to express my appreciation for your cooperation and understanding over the past 18 months. We have not always been able to accommodate your personal desires, but where it wasn't possible, at least we were able to tell you why we couldn't do it. We tried to be honest and up-front, and will continue to be. We will tell you exactly what our best professional judgment is and why, because this is the only way to operate a personnel management system.

COL JAMES A. SULLIVAN

CVI CHANGE

A recent change to AR 135-215 will affect many officers on active duty who want to enter the Competitive Voluntary Indefinite Program and compete for career status.

The revision establishes a two-year minimum period of active federal commissioned service for an officer before he is eligible to apply for a voluntary indefinite extension of active duty.

On the surface, this change appears relatively minor, but it does significantly affect officers who are on orders for overseas duty. Since most officers going overseas want to take their dependents, they must either apply for voluntary indefinite status (if they are eligible) or request an extension that is long enough for them to complete a full tour. The same could apply to officers who want special schools such as aviator training. These officers may have to apply for tour extensions to complete the obligation they will incur.

The intent of the change is to allow an officer enough time on active duty to build an in-depth Officer Military Personnel File (OMPF) before a selection board renders a decision that could prevent him from pursuing a career. In effect, the change allows two types of tour extensions. First, the short-term extension remains for those cases requiring from one to 90 days for extreme hardship reasons. Second, a longer extension of 90 days to 36 months can be requested to meet obligations incurred because of training or overseas moves. The formats for the extensions are shown in Figures 2-4 and 2-5, AR 135-215.

Although the change does allow a tour extension in lieu of a voluntary indefinite status, the change was made on the assumption that anyone with more

than two years of active federal commissioned service would apply for CVI. Therefore, Combat Arms Division will not accept a tour extension in lieu of CVI when an officer will have more than two years of service at the time the extension would take effect.

Questions regarding the new regulation or OPMD policy should be addressed to DAPC-OPE-P (AUTOVON 221-0146/0147).

LIEUTENANTS UPDATE

Lieutenants often express concern about what positions they should seek and how they stand compared to their contemporaries.

The most important thing is for Infantry lieutenants to seek positions in which they can have their leadership skills honed and develop their proficiency in the tactical and technical skills associated with the Infantry specialty.

The objectives for all company grade Infantry officers are to get platoon-level experience, to command a company-sized unit for a period of 18 months (plus or minus 6 months), and to complete their officer basic and advanced courses. But there is no established order for achieving these objectives and no standard pattern of assignment that assures success. In fact, Army requirements sometimes prevent an officer from being assigned to a duty position that supports his personal preferences or his professional development needs. Platoon-level experience, for example, may not be available for a lieutenant who is initially assigned to the Training and Doctrine Command, gets a command, and then is not reassigned until after his promotion to captain.

But whatever the duty position, performance is the single most important criterion for advancement. The primary document that various boards and Infantry Branch use to determine overall potential for future service is the OER. It provides an officer's manner of performance, his professional attributes, and his potential as demonstrated by the performance of specific

duties for a specific period of time. Although there is a tendency to overemphasize various sections of the OER, the report must be considered in its entirety with no single section outweighing the others.

The Army's assignment philosophy is predicated on the belief that all assignments are important. DA promotion boards are specifically directed to focus on an officer's performance and not to be unduly influenced by the diversity or the level of his assignments. An officer's entire record is used to determine his potential to perform in the next higher grade.

In summary, it is only natural for a lieutenant to be concerned about doing the "correct" job at the "correct" time. In terms of professional development, it is important for the Infantry Lieutenant to lay a strong foundation for future service as an Infantryman by serving in positions at company level. But it is even more important for him to perform all of his duties to the best of his ability. Through his enthusiasm and performance, his rater will best be able to identify his potential for future service and to convey that to promotion boards through his OERs.

USAREC DUTY

After completing the Advanced Course and commanding a company successfully, many captains find their next challenge in an assignment with the U.S. Army Recruiting Command (USAREC). You may be one of them, and it will be an opportunity to broaden your experiences and to command again. As the Chief of Staff of the Army has said, "Manning the total force is the major challenge the Army faces today," and the branch-qualified Infantry Captain plays an important role in recruiting and retaining quality soldiers.

There are now 257 Area Commander positions within USAREC, of which 63 are designated Infantry Captain positions. An Area Commander serves for a period of 24 months in this demanding position. He commands a

recruiting area staffed by enlisted recruiters and has the overall responsibility for actively leading, counseling, training, and supervising the enlisted recruiters. Additionally, the Area Commander coordinates with and briefs civilian educators and community leaders. He conducts analyses and inspections, and coordinates logistical and administrative support for the recruiting area.

If this sounds like a tough, challenging command, it is. That's why the branch-qualified officer is called on to serve as an Area Commander. Except for his branch qualification, there is not a more important or more challenging job for an Infantry captain.

It appears, however, that many officers in the field think an assignment to USAREC may be detrimental to their career development, but this is not true. The key to success in USAREC, as in any other duty position, is positive leadership, effective time management, enforcement of standards, and thorough job knowledge.

So don't listen to rumors or to someone else's negative opinions concerning an assignment to USAREC. In the final analysis, even though command of a recruiting area is sometimes an exasperating job, the officers who are selected for these positions are highly regarded. As the slogan says, "Be all you can be." Be an area commander.

SPECIAL FORCES

There is always a need for qualified company-grade Infantry officers to serve in Special Forces assignments. These unique and exciting assignments offer physical and mental challenges.

A captain's stabilization will not normally be broken for an assignment to Special Forces; his full tour must be completed before his reassignment will be considered. But a lieutenant who has had an initial assignment in an Infantry unit in CONUS or Korea can apply and may be reassigned after 12 to 18 months on station.

An officer who wants to volunteer

**TELEPHONE DIRECTORY
INFANTRY BRANCH — COMBAT ARMS DIVISION**

DESK	OFFICER	AUTOVON	COMMERCIAL
Branch Chief	LTC John F. Connolly	221-0207/7823	325-0207/7823
LTC Assignments, SC 11	MAJ Don Madison	221-0209/0317	325-0209/0317
LTC Other, ROTC	LTC Lynn Hunt	221-7823/0209	325-7823/0209
LTC SC 54	LTC Garrett Cowser	221-0317/0207	325-0317/0207
MAJ Assngments, SC 11	MAJ Dave Crittenden	221-7823/0318	325-7823/0318
MAJ Other	MAJ Russ Thompson	221-0318/7823	325-0318/7823
MAJ/CPT SC 54	MAJ Jim Gibson	221-0317/0318	325-0317/0318
CPT SC11/Advanced Course	MAJ Terry Young	221-0208/0209	325-0208/0209
CPT CONUS/Nominative	CPT Steve Smith	221-0207/0317	325-0207/0317
CPT Overseas/OAC	CPT John Kidder	221-0207/0208	325-0207/0208
LT SC 11	CPT Ron Thompson	221-0207/0208	325-0207/0208
LT Accessions	Mrs. Elaine Martin	221-0208/0209	325-0208/0209
Infantry Branch Representative (Fort Benning, Georgia)	CPT Mick Bednarek	835-3611/4381	545-3611/4381

for Special Forces training and assignment should submit a DA Form 4187 with substantiating documentation to show that the requirements outlined in AR 614-162 can be met.

SCREENING BOARDS ELIMINATED

Earlier this year, the Army eliminated screening boards for the promotion of officers to Chief Warrant Officers 3 and 4, Major, Lieutenant Colonel, and Colonel, and for the selection of officers to attend senior service colleges. The only screening

board that will continue to be held is the board for selection to attend the Command and Staff College, because of the large number of officers this board considers.

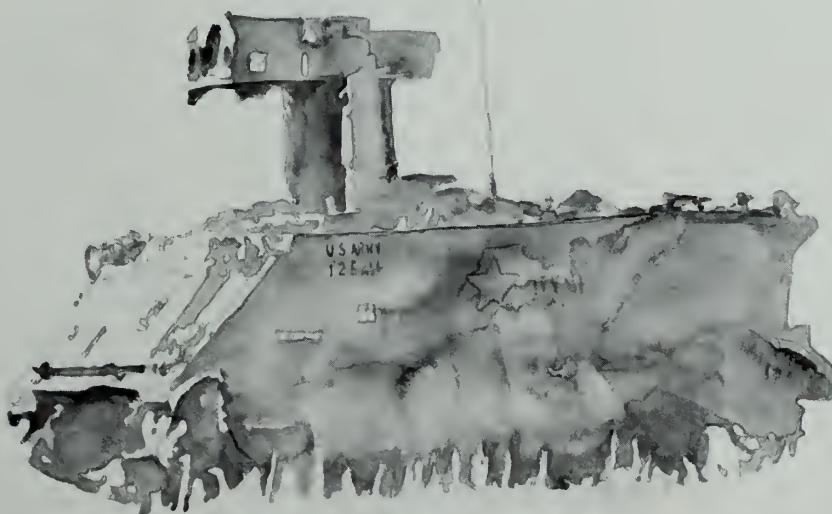
For promotions and senior service colleges, a single board will select officers from in the zone, above the zone, and below the zone of consideration.

The screening concept was introduced some years ago as a means of reducing to a manageable number the large number of officers under consideration. But two factors led to the elimination of the boards: First, the officer population is much smaller

now and can be managed by one board. Second, there has been a change in the policy of giving officers repeated chances for promotion to field grades from below the zone. Majors now have only one opportunity for selection from below the zone; colonels have two opportunities.

The elimination of screening boards should also improve the credibility of the boards, since one board now sees all the records and makes all the selections.

The change will cause some minor adjustments in this year's board schedule, but it will not affect the zones of consideration.



BOOK REVIEWS

The Battery Press of Nashville, Tennessee, has sent us five more of its recent reprints. In its airborne series are: **FOUR STARS OF HELL: THE 501st PARACHUTE INFANTRY REGIMENT IN WORLD WAR II**, by Captain Laurence Critchell (354 Pages. \$18.95); **THE WINGS OF PEGASUS: THE STORY OF THE GLIDER PILOT REGIMENT**, by George Chatterton (282 Pages. \$18.95); **FREELY I SERVED**, by Major General Stanislaw Sosabowski (203 Pages. \$16.95); and **NIGHT DROP: THE AMERICAN AIRBORNE INVASION OF NORMANDY**, by S.L.A. Marshall (425 Pages. \$18.95). And in the Press's combat arms series there is the **HISTORY OF THE 398th INFANTRY REGIMENT IN WORLD WAR II**, edited by Bernard Boston (208 Pages).

These reprints, like all the others we have seen from this Press, are extremely well done.

We have also received the last volume in the Department of the Army's Vietnam Studies Series. It is **DIVISION-LEVEL COMMUNICATIONS, 1962-1973**, by Lieutenant General Charles R. Myer (Superintendent of Documents, 1982. 109 Pages. \$5.00, Softbound). As its title implies, this monograph concentrates on the Vietnam communications experience at division level and lower.

From the Command and General Staff College's Combat Studies Institute at Fort Leavenworth we have received two more in its series of Leavenworth papers: **THE DYNAMICS OF DOCTRINE: THE CHANGES IN GERMAN TACTICAL DOCTRINE DURING THE FIRST WORLD WAR**, by Timothy T. Lupfer (July 1981. 73 Pages, Softbound), and **FIGHTING THE RUSSIANS IN WINTER: THREE CASE STUDIES**, by Allen F. Chew (De-

cember, 1981. 51 Pages).

Lupfer's study deals with a wartime evaluation of tactical doctrine and offers insights into the crucial role of leadership in bringing about doctrinal changes during battle. Chew's study, which includes both World War I and World War II examples, illustrate certain common lessons, many of which are valid today and worth an infantryman's study.

Finally, we have received from the Arco Publishing Company five compact but most useful reference books: **AN ILLUSTRATED GUIDE TO WEAPONS OF THE MODERN SOVIET GROUND FORCES**, edited by Ray Bonds (1982. 159 Pages); **AN ILLUSTRATED GUIDE TO RIFLES AND AUTOMATIC WEAPONS**, by Frederick Myatt, (1982. 159 Pages); **AN ILLUSTRATED GUIDE TO PISTOLS AND REVOLVERS**, by Frederick Myatt (1982. 159 Pages); **AN ILLUSTRATED GUIDE TO MILITARY HELICOPTERS**, by Bill Gunston (1982, 159 Pages); and **AN ILLUSTRATED GUIDE TO THE AIR WAR OVER VIETNAM: AIRCRAFT OF THE SOUTHEAST ASIA CONFLICT**, by Bernard C. Nalty, et. al. (1982, 159 Pages). Each guide sells for \$8.95 and each contains numerous photographs and drawings, many of which are in color.

Here are a number of other books we want you to know about:

THE IMAGE OF WAR, 1861-1865, VOLUME II: THE GUNS OF '62. Edited by William C. Davis (Doubleday, 1982. 460 Pages. \$35.00). This second volume in what is developing into an outstanding pictorial history of the Civil War lives up to the high standards set in the first of the planned six-book series. This one concentrates on the "fighter's year" — 1862 — "a year of almost constant

turmoil in embattled America." Using 650 photographs and nine tightly written essays, the editor and his publisher have produced another splendid volume. The photographic collection, in particular, is the keystone to the book; it is most impressive and represents one of the finest Civil War undertakings in this century.

GREECE AND ROME AT WAR. By Peter Connolly (Prentice-Hall, 1981. 320 Pages. \$30.00). The author has three other books on ancient military history to his credit. He is also a recognized authority on ancient arms and armor and does his own illustrations, which, in themselves, are outstanding. He uses two other specialists — Brian Dobson and Roger Tomlin — to prepare separate chapters on the Roman Army during the empire. This is a superbly presented volume that can be of invaluable assistance to the student of ancient military matters.

THE WAR WITH SPAIN IN 1898. By David F. Trask. The Macmillan Wars of the United States (Macmillan, 1981. 654 Pages. \$29.95). It has been several years since a volume in this particular Macmillan series was published. We were particularly pleased to see this one appear when it did because this particular war has never received a great deal of attention from U.S. military historians and because of the rising interest in the entire Caribbean basin.

David Trask is a U.S. State Department historian and calls his book a "military-political history." He has good reasons for doing so, for he concentrates as much on the political and diplomatic aspects of the war as he does on its military happenings. In doing so, he offers interpretations that differ widely from those that we are accustomed to hearing and reading about.



This is one of those books that should be read and studied by all infantrymen. It is also a most worthy addition to the Macmillan series on the wars of the United States.

THE IMPOSSIBLE VICTORY: A PERSONAL ACCOUNT OF THE BATTLE FOR THE RIVER PO. By Brian Harpur (Hippocrene Books, 1981. 202 Pages. \$19.95). The author served as a junior officer in the British Eighth Army in Italy in 1944 and 1945 and recalls quite vividly the terrible weather and terrain conditions under which the war in Italy was fought. He is particularly good at depicting the hard life of the frontline soldier.

And, yet, the title of his book is somewhat misleading. It is more a story of the events that led up to the battle for the Po River, and of the differing personalities, such as Mark Clark, Harold Alexander, and Richard McCreery, who occupied the highest positions in the Allied hierarchy and who were directly responsible for the final Allied victory in Italy.

Harpur, a British journalist, writes well, and his interviews with Clark and McCreery are classics of their kind. He may be partial to the British Eighth Army and its heterogeneous grouping of units, but none can doubt the depth of his feelings for the "poor bloody infantryman." This brief extract should show you what we mean:

"Make no mistake about it, the Infantryman had the worst job as well as the most important job in the whole war. At the end of the day, often a long, frustrating, and very frightening day when he saw his friends shot to pieces around him, and he knew it was his turn next, no ground was gained, no skirmish nor battle won, without that heroic and anonymous figure the ordinary infantryman winking out his adversary at the point of his bayonet."

SOVIET ARMED FORCES REVIEW ANNUAL, VOLUME 5, 1981. Edited by David R. Jones (Academic International Press, 1981. 329 Pages). Once again, David Jones

has pulled together a mass of most useful information to give us an overview of the Soviet armed forces, the fifth time he has done so in this series of annual publications.

There are several excellent essays in this particular volume, some of which deal with nuclear, chemical, and biological warfare, subjects which are becoming of great interest in this decade. There are also the usual large number of tables and charts. All in all, this is a most useful reference work.

And here are our longer reviews:

THE ROAD TO KHARTOUM: A LIFE OF GENERAL CHARLES GORDON. By Charles Chevenix Trench (W.W. Norton, 1979. 320 Pages. \$13.95). Reviewed by Rear Admiral George L. Phillips, United States Navy, Retired.

In 1884, General "Chinese" Gordon was killed at Khartoum in the Sudan, far up the Nile. His death came as the climax of a career that was possible only in England's golden age of 19th century Victorian imperialism.

Son of a general and with considerable family influence behind him, he was commissioned at 21 in the prestigious Royal Engineers, which launched him upon a life of restless activity, one marred by controversy, eccentricity, and megalomania. Because of his unstable character, it is fortunate that his service with troops was practically nonexistent. His talent as an engineer might well have been used to good advantage under close supervision, but perhaps as a bit of War Office wisdom he gravitated to independent advisory duties in the Crimea and then in China, attaining along the way some popular publicity, a flesh wound, and the nickname "Chinese." Urged on by his tremendous and immodest self-esteem and a hero-worshipping press, his star was

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We will furnish a publisher's address on request.

in the ascendant.

Gordon seems to have had plenty of time for his self-indulgence. A holiday visit to Constantinople and a chance meeting with the Egyptian Khedive Ismail brought about his involvement with the equatorial province of the Ottoman Empire, where he was sent by Ismail to be governor.

He warred with slave traders and weeded out corrupt and incompetent officials, but then quit for a post under the Viceroy of India, which he held for only two days. It was again on to China and then to Mauritius, in uniform as a Royal Engineer.

Eventually, unrest in the Egyptian Sudan, stirred up by the fanatic Mahdi, led to Gordon's appointment as Governor General under the intricate system of British overlordship of Egyptian rule. Arriving in Khartoum in February 1884, he was soon besieged by the Mahdists, although he managed to evacuate the considerable contingent of civilian residents by river steamers. Things went from bad to worse. Starvation, disease, unceasing attacks, and desertion took a rising toll, until in January 1885, after a siege that had lasted almost a year, the final enemy assault brought his death.

Gordon had accomplished little in his search for glory, which had brought out the worst in him. A hard drinker, vain, headstrong, conceited, a religious fanatic, and insubordinate, he had the habit of editing or changing his orders at his personal whim. With these character blemishes and a lack of administrative ability, Gordon had little going for him except a reckless courage, which, in the end, was his undoing.

This is a worthwhile study of Victorian colonial politics, and it illustrates the complexities of statecraft without close communications and government control. A greater man might have won success. Unfortunately, Gordon was not a greater man.

WAR AND RACE: THE BLACK OFFICER IN THE AMERICAN

MILITARY, 1915-1940. By Gerald W. Patton (Greenwood Press, 1981. 214 Pages. \$25.00). Reviewed by Lieutenant John J. McGrath, Fort Benning, Georgia.

From the Civil War until just before the outbreak of the Korean War in 1950, blacks served in the United States Army in war and peace as members of separate, segregated units. Although the black enlisted man found a place in such illustrious regiments as the 10th Cavalry and the 24th Infantry, prior to 1898 there were only three black officers in the entire Army.

In this scholarly work, Gerald W. Patton analyzes the role of the black officer in the Army from just before World War I to the beginning of World War II. The picture he paints is not a pretty one. Patton writes, for example, of the many injustices during World War I faced by the black officers who had been brought into the Army to serve with the two black divisions that were raised as part of the National Army. It is interesting to note that in Europe the French treated the blacks better than their fellow countrymen did, and that the Army's leaders considered the black officers unfit to be combat leaders because of "innate racial characteristics."

As a result, the Army viewed the World War I experience with black officers as a failure and after 1918 the role of the black officer in the peacetime Army was sharply curtailed. By 1940, in fact, there were only two black combat arms officers on active duty.

The coming of World War II restored the role of the black officer in the military services, although the Army's units remained segregated for the duration of the war.

Patton's book, another in the series entitled Contributions in Afro-American and African Studies, is a work for the scholar rather than for the reader interested in popular history. It has been intensely researched and contains a large number of detailed footnotes and a comprehensive bibliography. It demonstrates

how the opinions and prejudices of a society can be used to distort the decision-making process of the U.S. Army.

THE SOVIET ART OF WAR: DOCTRINE, STRATEGY AND TACTICS. Edited by Harriet Fast Scott and William F. Scott (Westview Press, 1982. 323 Pages). Reviewed by Captain Don Rightmyer, USAF Directorate of Soviet Affairs.

Don't be fooled by the title of this book. It is not a collection of paintings and prints of the Red Guard in the Russian October Revolution or of Stalingrad and Kursk in World War II. The connection is there, however, because this is an excellent collection of Soviet writings on doctrine, strategy, and tactics that range from the 1917 Revolution up through the early 1980s.

The editors of this volume are eminently qualified to put together such a work. They served two tours with the U.S. Defense Attaché's office in our Moscow embassy and currently possess the largest collection of Soviet writings in the United States.

Soviet military art bears no resemblance to any art-like field of knowledge, but forms one part of a hierarchical, scientifically-based area of study in the causes and conduct of war. The realm of military art contains Soviet strategy, operational art, and tactics. Each is concerned with the management of troop formations, logistics, and battle engagements at various unit levels.

While none of the writings included in this book pre-date the 1917 Revolution, there is a rich heritage of military thought and experience from the Czarist days that influences present Soviet military thought. The Soviets place a great deal of effort and time in the development of their military concepts and the thread of continuity is evident among these works.

This book will be an invaluable tool for all readers interested in examining the original works of Soviet military thought. This is the sort of basic information that will allow the reader in the West to gain a better

understanding of Soviet policy and force structures.

THE CHINA SEA: THE AMERICAN STAKE IN ITS FUTURE. By Harold C. Hinton (National Strategy Information Center, 1980. 44 Pages. \$3.95, Softbound). Reviewed by Doctor Joe P. Dunn, Converse College.

The National Strategy Information Center's agenda papers are brief essays on important strategic matters. In this paper, one of America's leading experts on China focuses on the increasingly important China Sea and its environs.

The China Sea is a major artery of commerce and communication, and is of great strategic importance. Its economic importance is heightened by the strong possibility of there being significant amounts of oil under the continental shelf. The countries of the area are engaged in trying to settle conflicting claims over territorial limits, the rights to islands, and control over underwater resources. Local military tensions are exacerbated by great power rivalries, especially the Sino-Soviet conflict.

Since World War II the United States Seventh Fleet has been the prime force in the area, but this supremacy is now challenged by the Soviet Pacific Fleet. Hinton contends that the U.S. must retain a strong presence in the area, and that a continuance of the country's post-Vietnam tendency to withdraw would only lead to more rather than less instability in the region. The U.S. has no choice but to remain a Far East power, and most of the nations in the area, including the Peoples Republic of China, consider a strong U.S. presence essential as a check against the Soviets.

This short pamphlet contains nothing new or profound. But it is well written and spells out the issues for the layman.

THE SOVIET ESTIMATE: UNITED STATES INTELLIGENCE ANALYSIS AND RUS-

SIAN MILITARY STRENGTH. By Jon Prados (The Dial Press, 1982. 367 Pages. \$17.95). Reviewed by A.W. McMaster, Headquarters TRADOC.

This book is as difficult to review as it is optimistic in the task it establishes for itself in its title. Without a doubt it is factually impressive, and the author clearly has had access to a large amount of data. But he does not cover any new ground in this critique of our national estimate process.

A strong plus for the author, though, comes when he attempts to clarify where and why our estimates have frequently proven faulty. It is "misperception." This, in turn, leads to wrong guesses and also brings about a tendency to use assumptions that underscore the estimates. Thus, at one time our estimates said that the Soviets were seeking missile superiority when, in fact, they were desperately trying to catch up.

Two other interesting themes are surfaced in this volume. One is the military services' penchant to build weapon systems before having clear missions for them. The other is that of "competitive analysis." Here, CIA estimates on Soviet military capabilities were considered as one, corporate opinion. The so-called "B-Team," headed by Paul Nitze and including many expert, "conservative critics," produced a second opinion. In retrospect, the latter was deemed to have done a better job.

By the way, the Army's new Concept Based Requirement System (CBRS) has all but alleviated the problem of system acquisition without finite rationale. Headquarters TRADOC has moved the Army to a far more sensible, cost-effective, and integrative materiel identification and development program. Inadvertently, the Prados book provides some justification for this new management style.

AMERICAN NATIONAL SECURITY: POLICY AND PROCESS. By Amos A. Jordan, et. al. (Johns Hop-

kins University Press, 1981. 604 Pages). Reviewed by Colonel James B. Motley, Office of the Secretary of Defense (International Security Policy).

This timely, interesting, and well-written book focuses on the intricacies of the national security process. The authors have prepared an excellent text that deals with the complexities and challenges associated with the national security matters that will probably confront policymakers in the years to come. They view national security as doing more than just protecting a nation's people from physical harm; they believe it also includes protection "through a variety of means, of vital economic and political interests, the loss of which could threaten fundamental values and the vitality of the state."

The book is composed of five major parts and includes appropriate figures and tables. Discussion questions and recommended readings are included at the end of each chapter. The end notes, assembled at the back of the book by chapter, provide an extensive bibliographic source for those who would like to continue their reading. A thirteen-page index concludes the book.

This book is highly recommended for the policymaker, the military professional, and the serious student.

SLIM BUTTES, 1876: AN EPISODE OF THE GREAT SIOUX WAR. By Jerome A. Greene (University of Oklahoma Press, 1982. 192 Pages. \$12.95). Reviewed by Professor Benjamin F. Gilbert, San Jose State University.

The battle of Slim Buttes, which occurred on 9 September 1876 in the Dakota Territory, symbolized the decline of the Sioux and the Cheyenne as the dominant power on the northern Great Plains. It was the first victory for the United States Army in the Sioux War and the climax to General George Crook's campaign to compel dissident elements of the Sioux to return to their reservations in the southwestern part of the Dakota Territory.

Prior to the battle, the Army had suffered three defeats. As a result, General Philip H. Sheridan, who commanded the Military Division of the Missouri from his headquarters in Chicago, formulated a new strategy. Accordingly, General Crook and his men of the Big Horn and Yellowstone expeditions were ordered to subjugate the Cheyenne and Sioux in the area. Crook found that the Indians had scattered and that their trail led eastward.

Crook decided to strike out for the Black Hills. Hoping to overtake the Indians, Crook insisted that his men travel lightly, but the resultant lack of food aggravated the physical discomfort of the troops.

Initially, the infantry set out each day one hour ahead of the cavalry. But once across the mud flats of the Little Missouri, the cavalry lagged behind the infantry. The cavalrymen were eventually forced to abandon, and even eat, their exhausted mounts. When a detachment was sent ahead on the strongest horses to procure provisions from the mining towns in the Black Hills, it accidentally discovered a large Indian village at Slim Buttes. The battle began with a surprise attack on the camp, but most of the fighting took place among the bluffs south and southwest of the village.

The book, a scholarly account of the Slim Buttes episode, contains an excellent selection of photographs and official documents, a reproduction of Walter M. Camp's 1918 article on the battle site, and a splendid bibliography. Those interested in the history of the American West and its military aspects should enjoy this superbly written book.

RECENT AND RECOMMENDED

PLANNING U.S. SECURITY: DEFENSE POLICY IN THE EIGHTIES. Edited by Philip S. Kronenberg (Pergamon, 1982. 214 Pages. \$7.95, Softbound).

IN THE WAKE OF WAR: MEMOIRS OF AN ALABAMA MILITARY GOVERNMENT OFFICER IN WORLD WAR II ITALY. By Robert M. Hill and Elizabeth Craig Hill. University of Alabama Press, 1982. 150 Pages. \$15.95.

INFANTRY LETTERS



FRIENDLY PROTESTS

Dear Sir,

As a reader of your excellent and highly interesting magazine, and as a citizen of France, I have to point out that the comments appearing on page 47 of the May-June 1982 issue of INFANTRY are unacceptable.

William Brooks, reviewing Anthony Mockler's book *Our Enemies the French*, wrote: "The French are probably the most politically perverse people in Europe, and they seem to become even more perverse when a discussion turns to World War II."

That insulting opinion has nothing to do with the book itself, which is very objective and has great historical merit. Brooks did not focus on what the author had actually written. A journalist should refrain from sweeping generalizations, especially when dealing with an allied nation.

Therefore, I consider it my duty to make a friendly but strong protest against such misleading reviews and I do hope you will be able to publish a correction as soon as possible.

JACQUES L. PONS
Colonel, GS
French Army
Fort Monroe, Virginia

Dear Sir,

In the May-June 1982 issue of INFANTRY magazine, I was surprised to read in the review of the book *Our Enemies the French: Being An Account of the War Fought Between the French and British, Syria, 1941*, a comment beginning with, "The French are probably the most politically perverse people in Europe, and they seem to become even more perverse when a discussion turns to World War II."

I do not intend to object to the reviewing of this book. History has to be studied even through such painful situations as when the Free French and the French Army of the Levant were led by the circumstances and by a different sense of their duty to fight a fratricidal war.

But I cannot consider that sufficient reason why all the French should be accused of perversity. Civil war, as everybody knows here, is not France's exclusive privilege. And I deplore that the serious and professional magazine INFANTRY accepts such an abusive generalization.

Moreover, this article was particularly inopportune, coming as it did at the very moment when our Army Chief of Staff, invited by General Meyer, was visiting your country.

Not wanting to suspect anybody of perversity in that matter, I simply prefer to think that the publishing of Mr. Brooks' personal anti-French resentments is due to an oversight.

I do not wish to dramatize this incident and I can assure you that it does not alter either my friendship for the United States and its Army or the good memory of my visit to Fort Benning in March.

M. de NORAY
Brigadier General
French Military Attaché
Washington, D.C.

EDITOR'S NOTE: We sincerely regret that one of our book reviews offended our friends the French. This was certainly not our intention.

GRATIFIED

Dear Sir,

I was particularly pleased to see

two recent articles in INFANTRY, namely, "Sustainment Training" (May-June 1982, page 23) and "Individual Training" (March-April 1982, page 36).

Ever since 1968 I have been trying to convince the Army that major emphasis in training should be placed on qualifying the individual officer and enlisted man in all the individual and collective skills of his TOE position. If this were done, relatively less time would have to be spent in unit exercises.

It has been an uphill fight, but Army magazine finally published my idea in abbreviated form in the June 1982 issue. So I am gratified to see young officers who realize the vital importance of a fully qualified individual and who are headed in the right direction.

Keep up the good work.

DAVID W. GRAY
MG, USA, Retired
Golden Beach, Florida

THE ARMY .45

Dear Sir,

Has the Army covered all its other requirements so well that it has \$100 million left over with which to change from an old (1911) pistol to an even older (1907) one?

The Surgeon General's book *Wound Ballistics* (1962) does not mention the 9mm round as having inflicted casualties on U.S. troops. It mentions the .45 somewhat more. Of the two, it seems from these reports that the .45 is from 10 to 100 times more effective than the 9mm.

If the Army has the money and wants a better pistol, why not improve the terminal ballistics? Why not use the Copperhead approach?

We have the technology (I worked on it for five years). That technology would provide a lower recoil and an exciting increase in terminal ballistics.

I was a rifleman in the Third Army during the time it took to go through the Siegfried line and to the Rhine. In seven weeks we had some 300 percent casualties, but, to a man, we were of the opinion that the 9mm round would bounce off our field jackets. Every German unit we went up against had thousands of Schmeissers (9mm submachineguns), yet none of us recalls that anyone was ever wounded by a 9mm round. Today my opinion is perhaps more realistic, but I would agree with the Surgeon General that nobody gets wounded by the 9mm, not when they are up against men who can shoot back with a .45.

ROBERT P. KINGSBURY
LTC, USAR (Retired)
Laconia, New Hampshire

ANGLICOS

Dear Sir,

Major William R. Jones' article "ANGLICO" (INFANTRY, May-June 1982, page 9) provides a good discussion of what an ANGLICO can do for the Army, but there are two omissions with which I must take issue.

First, Major Jones failed to mention the Third ANGLICO, a U.S. Marine Corps Reserve unit based in Long Beach, California, which provides outstanding support to West Coast organizations. The company regularly supports elements of the 40th Infantry Division (Mechanized), California Army National Guard, during CPX activities. (Some East Coast support is also available through a detachment of the Third ANGLICO in Florida.)

It would be a true disservice, both to the Third ANGLICO and to Army organizations in the western U.S., to leave the unit out of a discussion of the ANGLICO's capabilities, because it is an outstanding unit that actively

seeks training opportunities.

Second, Major Jones didn't mention the fact that brigade platoons (and subordinate elements) are capable of assisting in the employment of attack helicopters and in air-space management in the main battle area.

Before I'm accused of picking nits, let me say that our brigade recently conducted a brigade CAMMS (computer-assisted map maneuver simulation), supported by a brigade platoon from the Third ANGLICO, and that the experience was most rewarding. Working with the brigade FSE and DS artillery battalion, the Marines added a depth of fire support coordination that helped to graphically illustrate the importance of effective artillery and air support all the way to the company/team level (battleboard player/controllers). CAMMS, I might add, is not known for a satisfactory level of fire support battle resolution. The fire support community deserves additional recognition for working through that disadvantage, with the ANGLICO sharing heavily in the credit.

JAMES T. BILES
MAJ, Infantry
40th Infantry Division
San Diego, California

EDITOR'S NOTE: Major Jones did mention the Third ANGLICO in his manuscript, but since he talked in detail of only the Second, an editor with an overactive blue pencil made the decision to drop his brief mention of the Third. This was an unfortunate decision.

GETTING THE WORD OUT

Dear Sir,

When a unit moves to the field for training some of the most often heard comments are, "I never got the word," "No one told me," or "We never saw the Unit Training Plan."

This is not true when my National Guard unit goes for its annual train-

ing (AT) every summer. As Unit Training NCO, I have solved the problem of getting the word out to the men by giving each of them a pocket copy of the training plan when they arrive for annual training.

This pocket training plan contains each day's training highlights for the company, any special training, and the people involved in that training. It also includes specific times for things such as meals, sick call, and motor stables. It also includes memory joggers for the men, billet assignments, and anything else that is important to the unit.

A booklet such as this could be used by any Reserve or Guard unit at AT to get the word out to the men. Active units might also be able to use the same format when they are on extended field training. It takes a little effort, but the results are worth the effort. Everyone knows what, where, when, and who.

JOHN F. MINITER
SFC, Training NCO
HHC, 43d Brigade
Hartford, Connecticut

WHO ELSE CAN DO IT?

Dear Sir,

Some say that the appearance of high technology on the battlefield means that the role of the Infantryman has come to an end — that the pace of the modern battlefield does not allow for a weapon system that moves at two and a half miles per hour. They say that nuclear and chemical weapons render static and fortified infantry positions untenable and that long-range mobile weapon systems can out-duel any manportable weapon system.

If the modern battlefield could be expected to consist only of the steppes of Russia, the plains of China, the wheatfields of the midwestern United States, the pampas of Argentina, the sky above, or the vacuum in space, then Infantrymen would surely become ceremonial guards at state occasions.

But even this is not true, as Egyptian Infantrymen proved on the Sinai Desert. And have we forgotten the tough North Vietnamese Infantrymen who picked themselves up after intensive artillery and air preparations and were there to shoot when U.S. Infantrymen arrived to count their bodies?

Of course, the modern battlefield will not consist of wide open spaces alone; more often than not it will consist of rocky hills and mountains, the rocky rubble of cities, or forests, swamps, and jungles. There are many hiding places for a man on such battlefields. Can the enemy nuke or dust them all? And the direct fire ranges are short there, too. Can tanks and fighting vehicles use their superior range advantage? An Infantryman can slough through a swamp or pass between two trees or climb up a crevasse on these battlefields. Can a tank or a fighting vehicle use its superior mobility there?

The answers are obvious.

Some would say: Yes, but the terrain described would be associated with limited wars, and the American people will never fight such a war again. This argument is political, and polities change, but aside from that, it discounts the cities and forests of Germany and the woods and mountain passes of the Middle East. So why is the role of the Infantryman still questioned?

The Infantryman has borne the brunt of casualties in every war the U.S. has fought, but perhaps we are no longer willing to accept casualties. The Infantryman has the most physically demanding combat tasks on the battlefield, but maybe we no longer want to strain ourselves. The Infantryman has the closest contact with the enemy, but maybe we no longer want to actually see the enemy we kill. The Infantryman experiences terror and stress over long periods of time. His engagements are not over in minutes or seconds; he can fight for days over one building, mango grove, or hilltop. But maybe we no longer want to face fear.

No thinking man would say he really wants to do these tasks or face

these situations. Perhaps this is the real reason why the role of the Infantryman is debated. It is a dirty, frightening, and deadly job. So let's do away with it!

But before we do, show me how we will defend Stalingrad, Bastogne, Jerusalem, the Suez, the Mitla Pass, or freedom in Afghanistan without the "poor bloody" Infantryman.

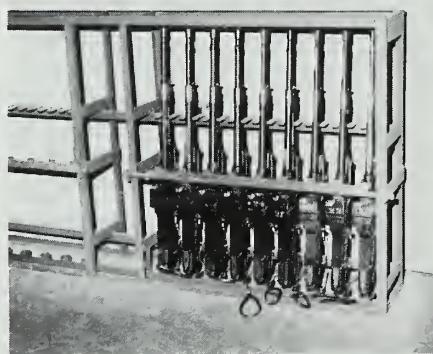
Until I've been shown this satisfactorily, I will take great pride in being an Infantryman and in doing the toughest, meanest, most demanding job on the battlefield, because it has to be done.

D. CHRISTIAN FRANDSEN, JR.
CPT, INFANTRY
San Jose, California

M240 WEAPON RACK

Dear Sir,

I noticed the news item in your May-June 1982 issue (page 5) stating that there is no weapon rack for the M240C coaxial machinegun. Earlier this year, inspired by my company commander, Captain John Chapman, I designed such a rack to replace the bulky wall lockers that were being used in our arms room. (See photo.)



The rack is made from cast iron railing, $1\frac{1}{2} \times 1\frac{1}{2}$ inches. It can hold 18 M240s in 90 inches of wall space and can be divided to hold nine. Another major feature is that all the barrels must be locked before the rack will secure the weapons.

The advantages are that the M240s can be issued faster from this rack,

there is less damage while they are in storage, and accountability is accurate and precise.

I have diagrams showing the entire layout, which others could use to develop their own company racks.

WALTER J. HINES
2LT, Armor
Co C, 2 Bn, 63d Armor
Fort Riley, Kansas

FOR NEW LIEUTENANTS

Dear Sir,

As commander of an IOBC training company at Fort Benning, I would like to offer a bit of advice to new lieutenants just out of the Basic Course — whatever their branch:

In your future assignments you will notice that some units execute their missions more professionally than others do. One way you can make sure your unit is among the most professional of these is to employ a thought process that focuses on three words — *requirement, system, and capability*.

As a commander or staff officer, you will receive requirements regularly — tasks or missions — normally from higher headquarters, either recurring or event-oriented. When you do, you should make sure you understand the specifics of each requirement — who, what, when, and where something must be done. For the purposes of management, it is helpful if you know the requirements early. Unfortunately, there will always be some that are short-fused, which will force you to do everything faster.

After receiving the requirement, you should visualize the system — the process or set of procedures that will be involved in satisfying the requirement. This process or set of procedures can be either complex (requesting supplies by air delivery) or simple (sick-call procedures). But whatever the system, you must understand it thoroughly if you expect it to work effectively for you.

Once you know the requirement

and understand the system, you must assess the capabilities of the subordinate units or individuals who are to accomplish the task or the mission. And if you assign a requirement to a unit or an individual, you must also see that they have what they need to do what is required.

This thought process of focusing on the requirement, the system, and the capability is not a panacea for accomplishing the task or mission, because there are many other variable dimensions, such as communications, leadership, decision making, and interpersonal skills. But it is a beginning, and it is a method that should be helpful to you throughout your career.

IRVINE C. PORTER III
MAJ, Infantry
Fort Benning, Georgia

SOME GOOD POINTS

Dear Sir,

I would like to comment on a couple of articles in the May-June 1982 issue of INFANTRY: "Rifle Zero," by Captain Everett D. Mayfield, and "TOW Training," by Captains

Stephen Bellene and John N. Davis.

Captain Mayfield makes some good points within the narrow scope of his article, but there are additional training issues that must also be considered.

and that the M16's thin barrel bends under a load. The product-improved M16 will have a heavier barrel, but until that hits the streets the weapon itself may contribute to poor marksmanship.

The same research showed that troops had trouble adjusting the rifle's sights. The ARI solution was to print job aids on an improved paper target. Obviously, units could have their training aids offices create stick-on job aids that could be placed on the rifle's stock. The improved target could also be printed on the bottoms of C-ration cases to give soldiers in combat, as well as in training, some means of sighting in their weapons.

Captain Mayfield's confidence in the procurement folks is surprising considering that Congress concluded that these same folks were guilty of "virtual criminal negligence" in the early M16-ammunition mismatch that killed American soldiers.

The most serious problem, however, is the apparent lack of content validity of the Army's marksmanship training and the presumed outcome — dead enemy soldiers. A soldier who must move and shoot while trying to hit a moving and shooting enemy has a task that is totally different from that of the



Recent research by the Army Research Institute at Fort Benning has demonstrated that there are a number of "lemon" M16s around

Infantry

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soldier who is sitting in a concrete foxhole shooting at standing targets from a known distance. Send an Army-trained rifleman goose or deer hunting, and he will likely starve.

Perhaps in the future we can procure human-engineered rifles such as the new British Enfield and get both higher performance and reduced costs. Although an Enfield-style weapon would cost more in initial hardware procurement, it could save more than \$50 million in ten years in training costs.

On the subject of TOW training, Captains Bellene and Davis also make some excellent points. It is unfortunate that better simulation devices are not available. The Operational Test and Evaluation Agency (OTEA) tested the TOW (with the warhead removed) against real tanks with a driver, and if that could be done during annual missile firing, we could verify gunner performance much better against real, moving, and reacting targets.

The second problem with TOW training is that the simulation folks are so stuck in the high-technology mode that they have forgotten what the field is like. They typically produce large, complex, electronic, expensive, indoor, and maintenance-

intensive devices. But what the field needs is small, portable, cheap, outdoor, and multi-use devices. Instead of a multi-million dollar computerized theater that troops can get into only once a year to train with the TOW, a platoon-set of 1/10 scale radio-controlled Russian tank models with mini-MILES sets could be procured. This would enable the entire TOW squad to train frequently on multiple, moving, and reacting targets at very low cost. A small smoke device attached to the MILES would provide instant feedback. This kind of device is especially needed in limited spaces (aboard ship) or on limited terrain (like the typical European square kilometer). In addition, training in other tasks (recognition, tactics, and command control) could be conducted with the same device.

Finally, I'd like to say that INFANTRY is the best single professional journal I have seen.

JAMES E. LARSEN
Hampton, Virginia

We welcome letters to the Editor on any subject that has been treated in our magazine as well as on issues of general interest to our readers. All letters are subject to editing and possible abridgment.

WORLD WAR II MPs

Dear Sir,

I am a military historian and author. For the past four years I have been involved in investigative research on the activities of the Military Police in Paris during World War II at the time of the Battle of the Bulge. I am interested in contacting any former members of the Military Police Corps who were stationed in Paris during December 1944 and January 1945 to assist in this research.

My address is Box 7361, Mississippi City Station, Gulfport, MS 39501.

DALE M. TITLER

MILITARY INSIGNIA

Dear Sir,

I am a collector of military insignia and would like to hear from any of your readers who might be interested in exchanging unit crests and foreign insignia with me.

My address is 8261 Blackburn, #C, Los Angeles, CA 90048.

MICHAEL PELL

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From The Editor

In assuming the editorship of INFANTRY, I am both awed and encouraged by what this journal has evolved into — a professional journal for the combined arms team. In its forthcoming issues, INFANTRY will remain true to its stated purpose: To provide current information on infantry organization, weapons, tactics, equipment and techniques; to provide a forum for professional ideas; and to present relevant historical articles. In addition, it will continue to provide career notes of interest, book reviews, letters, and Infantry news items.

We at INFANTRY believe that the hallmark of a professional is to read about and to study his profession. This in turn leads to basic, solid scholarship in reading, thinking, and writing, areas that when developed and exercised help the infantryman become a well rounded soldier. Therefore, we not only encourage you to continue reading INFANTRY, but ask that you consider putting your ideas and experiences in writing and submitting them to INFANTRY to be considered for publication. In this manner, then, the whole of the combined arms team can benefit.

As editor, I look forward to a challenging and rewarding time of service to you.

MDB

A SOLDIER'S ORISON

*Let me now bear the battle, Lord,
The terror and the pain,
With fortitude and faith restored,
And on my arms no stain.*

*Let me perform my duty well,
Whatever it may be.
On peaceful post, in battle-hell,
In air, on land or sea.*

*And if, though striving for the right,
Conflicting claims arise,
Let Honor's burning beacon-light
Show where my pathway lies.*

*Give me the grace and the constancy
To love, my whole life long,
The citadel of liberty,
My Country, brave and strong.*

*Grant this, and I shall be content
To rest beneath the sod,
True to myself, my regiment,
My country, and my God.*

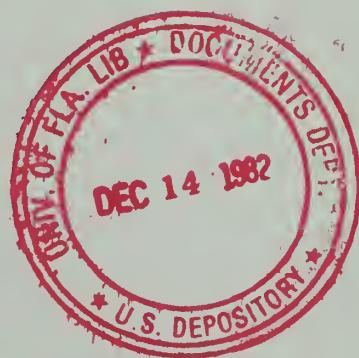
(By Richard Raymond)

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Infantry

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A Department of the Army Publication

62d Year

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A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

November - December 1982

Volume 72, Number 6

ARTICLES

- 13 TOMORROW'S RIFLE**
Captain Noyes B. Livingston III
- 16 SQUAD TRAINING**
Major David J. Ozolek
- 19 THE ASSAULT**
Captain Paul L. Conway
- 24 FAME IS A FLEETING THING**
L. VanLoan Naisawald

FORUM AND FEATURES

- 6 BUILDING A TEAM**
Dandridge M. Malone
- 8 A NEGLECTED SKILL**
Captain Derek Harvey
- 10 UNDERSTRENGTH PLATOON**
Lieutenant Michael S. Hackney
- 11 MODERNIZED LINE**
Captain Harry F. Noyes III

TRAINING NOTES

- 29 WINTER TRAINING**
Lieutenant Colonel Richard A. Dixon
- 31 JUNGLE RAPPELLING**
Master Sergeant Dave Goldie
- 33 CD TRAINING**
Lieutenant Kenneth W. Arnold
- 34 ADVANCE PARTY**
Sergeant First Class Steve L. Overholser
- 36 PERSONNEL INVENTORY**
Major Joseph A. Verrett
- 38 JFCC**
Captain Guy C. Swan III

DEPARTMENTS

- 2 COMMANDANT'S NOTE**
- 3 INFANTRY NEWS**
- 40 ENLISTED CAREER NOTES**
- 44 OFFICERS CAREER NOTES**
- 47 BOOK REVIEWS**
- 50 LETTERS**

FRONT COVER

With this issue we complete our 62d year of service to the United States Infantryman. We look forward to the challenges of the coming years as the Infantryman prepares to do what he has always done — fight, or prepare to fight, on the ground, for the ground.



USAIS

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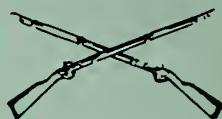
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

LEADERSHIP AT THE LIEUTENANT LEVEL

Leadership has been the heart and soul of the military profession since men first organized and armed themselves to defend their homelands. There is certainly nothing new, therefore, in the notion that the proper exercise of leadership is absolutely essential to the well-being of both small and large military units.

The Infantry School is in the vanguard of those who believe that outstanding leadership is a positive force that can enable the Army to succeed in all its operations, including combat. In fulfilling our responsibility to promote leadership, we begin at the beginning — with the students of the Infantry Officer Basic Course. It is during this branch qualification process that the tone of leadership development is set and that the enduring values and solemn responsibilities of our profession are instilled. It is here that we try to see that our prospective platoon leaders have the soldierly qualities, that they embody the Army ethic, and that they can exercise the principles of leadership.

The 16-week Infantry Officer Basic Course (IOBC) includes in its curriculum 201 hours of classroom instruction and 727 hours of field and range training. Some aspect of leadership training is present in each of these hours.

In developing and evaluating the students' leadership abilities, the IOBC curriculum uses all of their training — physical, mental, and interpersonal skills and professional knowledge. For example, to graduate, students must pass the Army Physical Readiness Test, complete a 12-mile road march in three hours or less, and be able to function effectively, with little sleep, during high-intensity field training exercises up to 11 days in length. They must demonstrate their proficiency in dismounted drill and command voice as part of the IOBC "School of the Leader" program. In addition, the students are required to present satisfactory periods of instruction on physical training and soldier's manual tasks and to complete all the 11B MOSC soldier's manual tasks themselves through skill level 4.

To further their knowledge of military leadership and to build upon the knowledge they gained during their precommissioning training, the students are given 29 hours of classroom leadership instruction in subjects such as decision-making, planning, and counseling. This instruction includes six hours of counseling workshops in which the students conduct soldier counseling and, in the process, refine the interpersonal skills and techniques they have learned in the classroom.

Because the ultimate goal of IOBC is to turn out a qualified Infantry platoon leader, the students are required to serve in

numerous leadership positions during the course, from squad leader through platoon leader. These positions are in garrison and tactical field training, in both blank and live fire exercises. Before they are allowed to graduate and report to their first unit of assignment, the students must demonstrate the proper use of troop-leading procedures, the proper technical and tactical expertise, and the ability to make decisions.

The key to developing the leadership skills of the lieutenants in IOBC is proper feedback and counseling. The cadre members — usually one captain and two senior NCOs per 40-man platoon — give the students this feedback and counseling. After completing a leadership position, each student is counseled on his actual performance, on his demonstrated strengths and weaknesses, and on what he needs to do to improve.

The format for the performance counseling is derived from the Leadership Assessment and Development Program that is used by ROTC and OCS. Thus, the performance counseling format and the terminology remain consistent and well-understood by the students throughout their Military Qualification Skills (MQS) I and II training.

In addition to receiving counseling on his leadership positions, each student is counseled on his total performance in IOBC during the sixth, eleventh, and sixteenth weeks of the training cycle. Furthermore, the students of each IOBC platoon conduct peer ratings in these same time periods; the results of these ratings are discussed during the counseling sessions. Thus, throughout the course a student officer is periodically presented an overall evaluation of his individual performance, his group relationships, and his leadership ability, with recommendations for improvement.

The Infantry School has a solemn and explicit contract to initiate in this course a developmental process that will give our Infantry units platoon leaders who are filled with a sense of pride and professionalism, confident in their ability to perform their skills in combat and motivated to command high-performance units.

Good leadership that is based on strength, knowledge, common sense, and sensitivity is the truest measure of a unit's overall combat readiness. The Infantry School enthusiastically accepts and actively exercises its critical responsibility to mold the Infantry leaders of the future.

Practice combined arms!

INFANTRY NEWS



THE 4TH AIRBORNE TRAINING BATTALION at Fort Benning, Georgia, trains thousands of soldiers each year to become paratroopers. The training is tough and demanding, and it calls for soldiers with a high degree of motivation and physical conditioning.

To qualify to attend the Basic Airborne Course, a soldier must volunteer, must have 12 months of active duty service remaining upon completion of the course, must meet the physical qualifications for parachute duty established in AR 40-501, and must be less than 36 years of age at the date of application. (Field grade officers, warrant officers in the ranks of WO 3 and 4, and enlisted personnel in the rank of sergeant/specialist 5 or higher may obtain waivers for age with favorable recommendations from medical doctors.)

In addition, enlisted personnel must have completed basic and advanced individual training or the equivalent, and must not have lost more than 30 days under Section 972, United States Code, during their current enlistment.

All applicants must achieve the following scores on the Army Physical Readiness Test (APRT): Men must do 45 pushups, 45 situps, and complete the two-mile run in 15:59 for a total of 206 points. Women must do 21 pushups, 32 situps, and run two miles in 17:55 for a total of 218 points.

Commanders who select personnel to attend the Basic Airborne Course should refer to AR 614-110 and AR 614-200 for additional information regarding the selection and processing of volunteers for airborne training. They are reminded that airborne training is not for everyone; they should make sure the students they

select stand a good chance of succeeding.

Students must have in their possession when they arrive at Fort Benning a copy of their medical records, with certification that they are qualified for airborne training, and a copy of their official orders. Students who do not have these items with them will not be admitted to the course.

Any student who arrives at Fort Benning in top physical condition and with a high degree of motivation and an eagerness to learn stands a good chance of graduating from the Basic Airborne Course.

A NATIONAL INFANTRY MUSEUM exhibit recently installed in the Pentagon has as its theme "Two Centuries of Proud History." The exhibit, which will remain on display near the office of the Secretary of the Army through November, includes almost 200 items showing the development of weapons, uniforms, and equipment used by the infantryman over the past 207 years.

Firearms from the flintlock musket of the Revolutionary War to the M16 used in Vietnam are on display, along with edged weapons ranging from swords and bayonets to a rare

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paratrooper's switchblade knife used during World War II.

The uniforms in the display are all authentic, from an 18th century Massachusetts militia uniform to the "pinks and greens" used in the 1940s to the camouflaged battle dress uniform of today.

In addition to the essential military equipment such as entrenching tools, powder horns, battle streamers, rations, drums and horns, and gas masks, there are artifacts that highlight the human or personal side of a soldier's life. These include such items as coffee cups, playing cards, barber equipment, a soap dish, a hymnal, a prayer book, and photographs from home.

The backdrop for the display features an award-winning photograph of the famous Fort Benning "Follow Me" statue.

In other news from the Museum, the annual Infantry Museum road race was held for the second time this year with the proceeds going to the National Infantry Museum Society Fund to be used for the renovation of the Museum's third floor.

Additional information about the Museum and the Museum Society and its various projects, including next year's road race, may be obtained from the Curator, National Infantry Museum, Fort Benning, Georgia 31905, telephone 404/544-4762 or AUTOVON 784-4762.

THE DISTINGUISHED DOUGHBOY Award is presented each year to an individual who has been instrumental in improving the morale and welfare of the infantryman.

Bill Mauldin, famed author and cartoonist, is the 1982 recipient of the

award and was honored at the National Infantry Ball, which was held in Washington, D.C. on 13 November 1982.

The award, established in 1980, is a brass-plated, World War I doughboy helmet mounted on a walnut base that is decorated with crossed rifles. The previous honorees were Bob Hope in 1980 and H. Ross Perot in 1981.

The nominating committee, which is chaired by the Chief, Infantry Branch, MILPERCEN, realizes that individuals who deserve to be recognized may have been overlooked during the nominating process. Accordingly, any infantryman may nominate a candidate for the 1983 award.

The following criteria are used in selecting the recipient:

- The award is presented to an individual, not to an organization, in recognition of that person's direct efforts to aid the infantryman.
- The award is not presented posthumously except when the recipient dies after being selected.
- Active duty military members are not eligible for the award.
- Civilian executives who are active in the defense establishment are not eligible for the award.
- The recipient must not be directly involved or affiliated with an organization that has defense industry contracts.
- The recipient does not have to be present to accept the award.

The final selection is made by the Commander of the U.S. Army Infantry Center and School at Fort Benning.

The name of any individual who meets the above criteria and who has rendered great personal service to the morale and welfare of the Infantryman should be submitted to HQ MILPERCEN, ATTN: DAPC-OPE-I (Major Warren), 200 Stovall Street, Alexandria, Virginia 22332 as soon as possible.

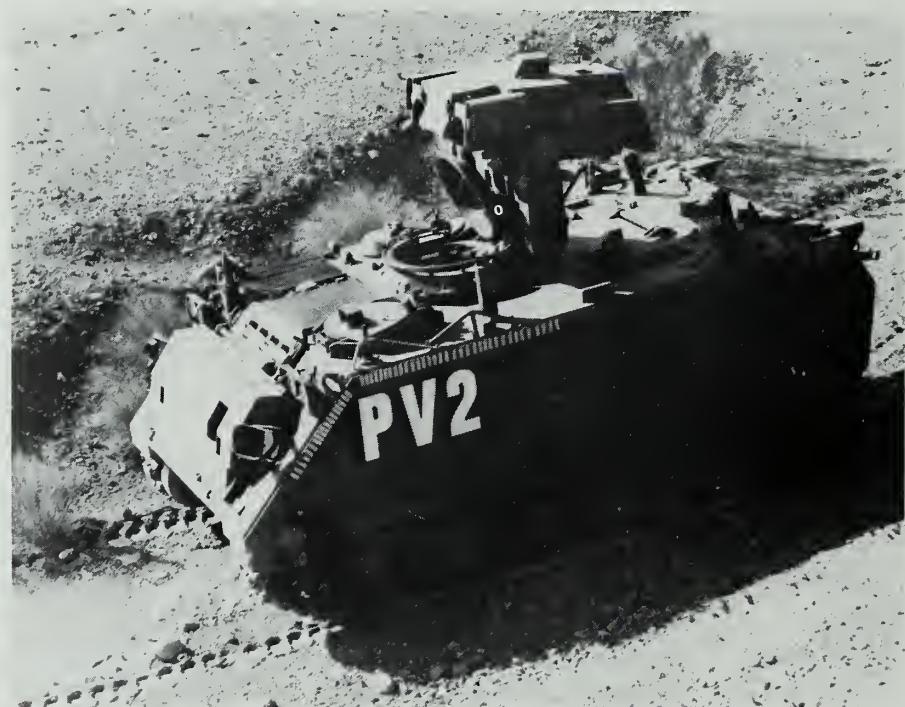
A SOLDIER TESTS A decontamination apparatus in sub-zero temperatures at the Army's Cold



Regions Test Center, Fort Greely, Alaska.

The Center is one of nine Test and

Evaluation Command installations and activities in the United States and the Republic of Panama.



A FIRE SUPPORT TEAM VEHICLE (FIST-V) is shown as it undergoes engineering design testing at Yuma Proving Ground, Arizona.

The test program included automotive, durability, environmental, and mission performance testing.

IN SEPTEMBER 1981, Army Extension Training (AET) distributed a series of new publications, the Extension Training Materials (ETM) catalogs, which were identified as DA pamphlets in the 350 series. These catalogs listed the available extension training materials. There were 77 different books for specific ARTEPs and TOEs. A consolidated listing of MOSs (DA Pamphlet 350-100) was also distributed to TDA units.

All of these ETM catalogs have been updated and distributed to the field. Some additional catalogs to support new ARTEPs have also been distributed. The new editions were distributed in the same way they were distributed last year.

Units that did not receive the initial distribution of the ETM catalog should advise the Army Training Support Center (ATSC), ATTN: ATIC-AET-IO, Fort Eustis, Virginia 23604. Requests for additional copies should be addressed to U.S. Army AG Publications, 2800 Eastern Boulevard, Baltimore, Maryland 21220. The following information should be included: unit name and address; unit identification code (UIC); unit ARTEP, TOE, TDA; and point of contact (person and telephone number).

A GEORGIA ARMY NATIONAL GUARD unit, the 48th Infantry Brigade, recently received 51 M901 improved TOW vehicles (ITVs) and 70 M60A3 tanks. The brigade was one of the National Guard units to obtain new, tactical equipment. It was selected to get the new equipment because in the event of mobilization it will become the third maneuver brigade of the 24th Infantry Division, a part of the Rapid Deployment Force.

THE ARMY RECENTLY ACCEPTED the first of more than 300 multiple launch rocket systems that it plans to buy in the coming months.

This is a highly mobile automatic rocket system that permits its crew of



three, with a minimum amount of training, to shoot a complete 12-rocket load accurately, reload quickly, and fire again. Its surface-to-surface unguided rockets have a range of more than 30 kilometers (18 miles) and can deliver a massive amount of firepower against enemy forces.

The launch vehicle has a sophisticated fire control computer and a position-determining system that make it the most accurate artillery rocket system in the world today.

THE FIRST PRODUCTION UNIT of the Army's new AN/MSQ-103A TEAMPACK radar monitoring system was recently completed.

The TEAMPACK system is housed in a ballistically protected shelter and



is then mounted on an XM-1015 tracked vehicle. The system can be mounted on an M35 utility truck, a light armored vehicle, a jeep, and on other types of vehicles.

Surveillance, air defense, mortar, and artillery ground-based radars are all detectable by TEAMPACK. Some of the improvements it has over the earlier systems of its type are improved reliability, better crew protection, and growth features that will enable it to be used well into the future.

ARMY ENGINEERS AT THE Chemical Systems Laboratory, Aberdeen Proving Ground, are developing a portable decontamination apparatus for use on Army vehicles.

Known as the XM13, the portable decontamination apparatus is designed to dispense a standard chemical decontamination solution. It permits the field soldier to cover selected surfaces of a vehicle with a decontaminant, scrub with a brush, and continue his mission.

The lightweight apparatus consists of a prefilled decontaminant container, a manual pump, a hose wand, and an attachable brush. It weighs less than 60 pounds when filled.

Army officials expect the XM13 to be fielded in 1984 after a series of developmental, operational, and production tests.

A TOTAL SHORT RANGE AIR DEFENSE (SHORAD) system was recently shown for the first time as part of a series of field training exercises by the 9th Infantry Division.

The overall system is composed of a towed Chaparral surface-to-air missile system, a shoulder-fired Saber beamrider missile, a towed light Sergeant York (DIVAD) 40mm gun, and a truck-mounted platoon coordination center that has a Sergeant York gun radar and a fire control system. It has been designed as a lightweight system for rapid deployment by future Army light infantry divisions.

FORUM & FEATURES



Building A Team

DANDRIDGE M. MALONE

War sure isn't a game, but thinking about games can sure help you learn about war.

Think about a football team — think about what it does, and how it operates. Now see if you can come up with a half-dozen examples that show how a football team is something like a unit on the battlefield. That ought to give you a pretty good idea of how teamwork works, on either the playing field or the battlefield.

How do you build a team? Let me lay out for you, first, an overall team-building strategy, and second, a number of specific how-to's for doing what one of those principles of leadership tells you do to — train your men as a team.

Fire team leaders build teams out of their subordinate individual soldiers. Squad leaders and above build teams out of subordinate leaders and their teams. In either case, there is one simple overall leadership strategy for building a team. It is an overall way of operating, not a specific how-to, and it has two requirements.

A leader must constantly, on a day-to-day basis, do things and say things that will convince each individual team member that he is a part of a whole team — not just any old part,

but an essential part, a part that other individuals depend upon to get their work done, and that the whole team depends upon to get its work done.

The second requirement of the strategy is that a leader must do and say things daily to convince the individual team members that their



wants, needs, hopes, and goals are tied to the team's performance, output, and work. Each individual team member will usually operate in his own best interest. He'll do what he thinks is best for him. That doesn't sound too admirable, but it's a fact of human nature. In building a team, what a leader has to do is to convince each team member that the best way for him to get what he wants is through what the team does.

In essence, this team-building leadership strategy says:

- Convince each team member that the other team members and the team as a whole are dependent on him.

- Convince him that much of the whole business of reward and punishment, for him, is tied to the output or performance of the team he belongs to.

Building the complex kind of team that a battlefield requires is tough. A leader sure can't get it by asking for it or by just giving an order. It takes time, and thinking ahead, and the sixth principle of leadership: Know your soldiers and what's inside each one.

Beyond the general strategy, there is no step-by-step procedure that is very practical for company-level leaders to use. But there are about ten good team-building techniques that have come from experience and research. They've been around for a couple of thousand years and they'll work for captains, lieutenants, and sergeants.

Use drills. The best way to build the kind of team a unit needs is the way that's probably already obvious — use drills. Dismounted drill is good, but the best drills for the kind

of teamwork a unit needs most are spelled out in the ARTEPs. If a unit can't get out in the woods, then it should walk through an ARTEP on an open field. (I wonder if a unit could have an ARTEP parade?) If a unit can't do that, then it should try a blackboard, or a terrain model, or a map.

Drills must always be critiqued, and the performance of the team, and how each individual team member contributed — or failed to contribute — to the team's performance must be discussed. The specific places where the coordination and the timing of individuals and teams worked and didn't work should also be pointed out.

Use stress. High stress and heavy pressures applied to the whole team will build teamwork. That's a fact. The trick is to do it right. Events, exercises, and activities that are extreme challenges, and that demand a hardcore, all-out effort by the team and by each team member, will build teamwork. Add danger and that teamwork gets even stronger. The high stress of battle puts teams together so well — sometimes in just a few hours — that they continue to have annual get-togethers for years after the war is over.

In training, a unit should get as close to battlefield stress as it can. If you don't have a war, Captain, try a 100-mile road march; or run 10 miles with weapons, helmets, and LBE; or climb a mountain; or run a super-rough, non-stop, day-and-night, 24-hour battle drill over the worst terrain you can find. Do any or all of these high stress events as a team. Then later, start listening for the bragging and the war stories. About "Us." It'll work. Guaranteed.

Work by teams. Get tasks done by teams, rather than by "details." You, First Sergeant, can do a lot about this. Next time the battalion hits you up for "a 10-man detail and one NCO," check into the chain first, but then send a fire team with its own team leader instead of a detail. Chances are good that half as many men, working as a team, can do twice

as much work in half the time. Bet on it. And if you're as smart as I think you are, you'll let the team know you bet.

Leave teams together. Whenever there are formations, leave teams together. "Break off and fill it in back there!" may make the platoon formation look better, Lieutenant, but what you're breaking up is a team and teamwork. How units work is more important than how they look. And you're supposed to be a specialist in unit work.

Whenever you, Sergeant, as the leader, must form your men, brief your men, move your men, work your men, critique your men, feed your men, or billet your men, do it the same way you're going to have to fight your men on the battlefield. Do it as a team. You can tell your troops, "Everyone be down at the motor pool at 1300 to clean the tracks." That's the way a Boy Scout leader might try to do it. It may (or may not) get them all there by somewhere around 1330. And, Sergeant, if you do it that way, you've just lost one of those valuable day-to-day opportunities to keep working on teamwork. Instead, form your soldiers as a squad in the company area, march them to the motor pool, in step, stand them at ease, give them their instructions with something like a 3- or 4-minute version of the five-paragraph field order (including standards in the mission part), supervise the fire team leaders, keep the whole squad at it until the whole job is done, form them up again, critique their performance as a team, march the whole squad back to the company area, and only then turn them loose to be individuals.

If you as the leader can keep your subordinates working and living as a team in their day-to-day activities, those ARTEP drills will automatically come out far better, and so will that thing that we call The Company when it fights on the battlefield.

Move men on manning boards, not names. Up on the wall in the orderly room or the C.O.'s office, there's a manning board. It probably looks like nothing more than a chart

covered with acetate and filled in with a grease pencil, but it is the main tool for building and maintaining teamwork. The First Sergeant and the platoon leaders will be making the primary recommendations about who goes where, but the C.O. will be making the decisions. Never move a name around, Captain, without first thinking about the effect on teamwork and the team. When you move names around in an attempt to even out strength figures, you may be doing the same thing the Lieutenant does when he evens up his platoon formation. The board may look better, but the unit may work worse because you've unintentionally destroyed some of its teamwork power, some of that "extra."

Each time you move a name, what you're really moving is a man, and you're moving him out of his family. More importantly, when you move him, you're moving a part of something bigger. If that something bigger is a smooth-functioning team — a fighting machine — then what you may be doing is pulling out the carburetor. And a carburetor can't be replaced with an oil pump. As a general rule, hold manning board moves to an absolute bare minimum, and always consider first the effect on that team of which the soldier is a part.

Talk team language. There is a simple, guaranteed way all leaders can build teamwork. They should simply start using the team words — *we*, *us*, and *our* — instead of the three individual words — *I*, *me*, and *my*. When a leader starts leading by example with his language, his followers will follow. And they'll start talking and thinking more about *us* than about *me*. The first two letters in U.S. Army are US. The last two are "My." Think about it. It isn't a bad philosophy.

Build team reputation. Any man worth a damn will work hard to live up to his reputation. So will a team. Whenever a team does something that is both unusual and good, and when the members do it as a team, all the leadership of the whole unit should

know about it. When this happens three or four times, the word will get back to the team. At that point, they'll find out that they do have a reputation to live up to.

Reward or punish the team. Whenever a leader supervises a task that requires a high degree of teamwork, like maybe an ARTEP, then he should try to gear his supervision, critique, reward, and punishment to what the team does, more than to what the individuals do. He should do it in such a way that each individual can see clearly that what he wants most (or maybe wants least) depends more on what the team does than on what he does.

Punishing a whole team is extremely effective, but it should be done very carefully. A whole team should be punished when all the hand-offs are too sloppy or too slow, when there's no trust among the parts, or when all the parts get to thinking more about *me* than about *us*.

Set the example. Next to drill, the best thing for building teamwork is that all-powerful, all-purpose leadership tool that has been discussed so many times — the fifth principle of leadership: Set the example. It's not hard to do. If you're a squad leader, for example, you probably want your

squad members to believe that for them the squad's mission is the most important thing there is. If you do want them to feel this way, then all you've got to do is show them that for you, the squad leader, the platoon's mission is the most important thing there is.

If you're a squad leader, never complain about the platoon's mission or the platoon leader in front of your followers. If you do, they're going to follow your example and complain about the squad's mission and about you. Do you want your followers to cooperate, work together, and trust each other? Then show them, by example, that that's exactly how you work with other squad leaders. From the motor pool to the battlefield, in any situation, followers will do as their leaders do. Good or bad. That's the plain chemistry of followership.

Emphasize differences. Find out what makes one team different from the others, and keep emphasizing those differences. It may be the kind of work they do, or where they do it, or when they do it — whatever makes them different from other teams. This is another way of telling team members that their team is something special, something different, something important.

Want to build teamwork in your company, Captain? Well, one thing that's always different in any unit is the unit's history. Send a letter up through channels and find out what your company did in the last war or two. Then sit down some time and tell the troops about their team at war, and how it fought in wars in the past. No lectures, just a talk and some stories. Do this two or three times, covering two or three wars, and watch what happens with teamwork.

There now, you've got a simple strategy and some simple how-to's for building a team. All of them are easy, common-sense things to do. Will they work? Well, let's go back to where we started, to the football game. Find a team that nearly always wins. Read up on it a little, how it works inside, and what the coach does. What you'll find is the strategy and most of these same how-to's.

DANDRIDGE M. MALONE, a retired Infantry Colonel, has published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools, including the Armed Forces Staff College. In addition to his Infantry leadership assignments, he also served in either staff or faculty assignments at the U.S. Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

A Neglected Skill

CAPTAIN DEREK HARVEY

When a new infantry lieutenant reports to his first assignment, he may know quite a bit about how he is supposed to help his company win in battle, but he often knows very little about another important concern — administration. He may not even

think that administration is very important, because in too many cases, administration is a neglected skill.

Although the infantry officer basic course gives a brief overview of the subject, it does not adequately prepare a lieutenant in the many aspects

of administration that he will encounter. One reason for this lack of emphasis may be simply a lack of resources — time, money, and instructors. But another reason may be that administration is difficult to teach; it not only encompasses a wide variety

of complex tasks, but the typical lieutenant, at this stage in his military career, has no reference point from which to gauge its relative importance. He finds this reference point only through experience in his unit, and it is there that he must learn about administration.

Most of the responsibility for overseeing this aspect of a lieutenant's professional development, therefore, falls on the unit commander, and this in itself can be a problem. If a commander is to impress on a lieutenant the important role the latter is expected to play in the unit's administration, he must first take a look at his own attitudes toward the subject.

Some commanders, for example, tend to belittle the importance of a lieutenant's role in company administration. Too many also vocally condemn staff requirements in general, perceiving such requirements as intrusions on efforts and resources they feel should be devoted to what is really important — training and maintenance. They may even ask aloud, "Just what the hell is important around here anyway?" The answer, of course, is that it is all important, and that is the attitude each commander must convey to his new lieutenants.

But beyond a positive attitude, how does a commander go about seeing that his lieutenants learn what they need to know? First, he should consider starting an informal on-the-job training program so that the lieutenants can develop the skills and knowledge they need to cope with their various duties. Then the commander should demonstrate the importance of administration by emphasizing it, and he should show an interest in what the lieutenants are doing by asking questions, inspecting, and teaching, and by requiring briefings from them on the status of their various programs. This interest will demonstrate better than anything else the importance of good, clear, well-organized, and responsive administration.

If he uses sound management principles, a commander can do all of this without adversely affecting his unit's

ability to accomplish its major missions. In fact, his major missions may profit from improved administration, because sloppy administration can produce some pretty negative results: The company can have poor morale from long hours, late personnel actions, or pay problems; it can require crash programs to pass inspections, which also cause more work, increase pressure, and further affect morale. Without good administration, crisis management becomes the norm, unit problems may surface at higher levels that could have been taken care of at lower levels, and the quality of life in a unit can deteriorate. In addition, a unit may get a bad reputation from the quality of its administrative products.

The unit's annual general inspection and the numerous other inspections it goes through are all easier to prepare for and to undergo when the many administrative areas have been properly managed, organized, and emphasized on a continuing basis.

SOLDIERS' WELFARE

Especially important are the many areas of administration that let the soldiers know that the system is functioning and that their leaders have a sincere interest in their welfare — such things as finance, pay, counseling, letters of indebtedness, personnel actions, leaves, weight-control programs, legal affairs, re-enlistment, promotion, and equal opportunity. If these matters are handled well, the results will be worth far more than the time that has been invested in them. And when a lieutenant becomes able to answer administrative questions with authority, to recognize and take care of problems, and to initiate actions, he will be better able to take care of his soldiers.

Another sensitive area of administration involves such duties as fire or building inspector, safety officer, maintenance officer, weight-control monitor, and education officer — duties that are usually assigned to a unit's lieutenants as additional duties.

Some of the more seasonal duties might include voting officer or project officer for the Combined Federal Campaign or the Army Emergency Relief Drive.

For all of these, a lieutenant needs a good sound grasp of such administrative fundamentals as writing, organizing, and understanding how to use files and regulations. Although files and regulations may seem unimportant to some people, anyone inspecting them can get a pretty good indication of how well that unit is meeting its other requirements.

As much as possible, a company commander should see that all of his lieutenants receive the same opportunities and duties. If he does not, their experience levels will differ considerably. Sometimes a commander is tempted to give certain tasks to the same lieutenant each time, because he knows that lieutenant will always do a good job. Or he may avoid giving any additional duties at all to an especially hard-charging lieutenant because he has more important things for that lieutenant to do. But both of these approaches are wrong; they deny others an opportunity to prove they are just as capable.

A company commander has a tough job, but there are definite rewards that come from dedicating himself to educating and developing his lieutenants in administrative tasks. The net result will be better, more capable subordinates who can then relieve him of some of his pressures and concerns.

In addition, the entire unit will be better off because of improved morale, respect for the chain of command, a better quality of life, more unit cohesion and pride, and improved inspection results. Finally, those outside the unit looking in will see a more professional unit that has its act together.

CAPTAIN DEREK HARVEY, an Infantry officer who recently completed the Armor Officer Advanced Course, formerly served in several assignments at Fort Benning, including tours as executive officer of an Infantry Training Group company and of a Ranger company. He is a 1977 ROTC graduate of Arizona State University.

Understrength Platoon

LIEUTENANT MICHAEL S. HACKNEY

Understrength rifle platoons are not a rarity in today's Army. In fact, they are commonplace. In Europe, for example, many mechanized infantry platoons have only 18 to 25 men in them, and the five- or six-man squad is usual. But the basic TOE for a mechanized infantry platoon in Europe calls for 4 M113 APCs, 4 Dragon trackers (one for each vehicle), 4 caliber .50 and 5 M60 machine-guns, 6 M203 grenade launchers, 32 M16 rifles, plus radios, night vision devices, and a mass of other equipment.

The problem for a platoon leader in this situation is to know how to combine the men he has with all this equipment in the most effective way so that the platoon can carry out its missions. He must tailor his platoon to allow the utmost individual and squad flexibility while maintaining

unit integrity. One way he can do this is shown in the accompanying chart.

The platoon's headquarters section consists of the platoon leader, the platoon sergeant (who rides in a squad APC), and the command track crew, which consists of the crew leader, the radio-telephone operator (RTO), and the driver. When possible during dismounted operations these men also supplement the squads. Their responsibilities, generally, are as follows:

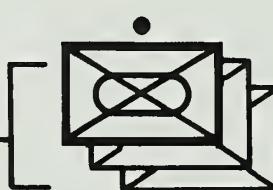
The command track leader, usually a corporal or a sergeant, mans the caliber .50 machinegun and carries a Dragon tracker. He is responsible for the command track vehicle and its crew. When dismounted, he becomes the second team leader for one of the squads. His individual weapon is an M16 rifle.

The RTO is responsible for an M60

machinegun and is the command track's air guard. When mounted he operates the command track radios. During dismounted operations, the company and platoon net radios are carried by the platoon leader and the RTO (armed with an M16 rifle), or by the driver if the RTO must employ the M60 machinegun in support of the platoon's operations.

The driver carries an M16 rifle and serves as the assistant caliber .50 machinegunner. Dismounted, he acts either as an RTO or as a squad automatic rifleman. He should be the most capable driver in the platoon, since he must perform vehicle and equipment maintenance with only limited supervision.

The five- or six-man squad does have many of the capabilities of a full strength squad both in movement and firepower. But because the small



Platoon Leader—M16
Platoon Sergeant—M16
Command Track Leader—
cal. 50 MG, M16,
Dragon Tracker
RTO—M60 MG, .45 cal,
or M16
Driver—M16, asst cal. 50 MG

Squad Leader—M16
Team Leader—M203, Cal. 50 MG
Dragon Gunner—M203, Dragon Tracker
Machine Gunner—M60 MG, .45 cal
Driver—M16, asst cal. 50 MG
Auto Rifleman—M16

Note: Platoon Sergeant rides on a squad track.

squad must depend heavily on exploiting the full effects of its machineguns, Dragons, and M203s, a squad leader must make sure his men are trained to use the various weapon systems.

The team leader is usually a corporal or a sergeant. If his vehicle has one, the team leader must be capable of firing the Dragon system from the vehicular Dragon mount (VDM). He carries an M203 grenade launcher when dismounted. He and his driver are also responsible for operating the vehicle's caliber .50 machinegun and for maintaining the vehicle.

The driver carries an M16 rifle, assists with the caliber .50 machinegun, and mans that weapon in stationary or defensive positions when the team leader is away from the vehicle. When dismounted, he carries a Dragon missile and assists another squad member in operating an M60 machinegun.

The Dragon gunner carries the Dragon system and is the primary M203 gunner for the squad. He must

also be able to fire the Dragon from the VDM, and, when dismounted, he must know how to fire the Dragon from the M60 machinegun tripod.

The M60 machinegunner must be prepared to operate in most situations without an assistant gunner. He also serves as the vehicle's rear security and air guard.

The automatic rifleman rounds out a six-man squad. He carries an M16 rifle and serves as an assistant Dragon or M60 gunner as the situation requires.

In a dismounted situation, the team leader should be on the ground, and the driver should man the caliber .50 machinegun. If additional automatic fire is needed, the automatic rifleman can be given the platoon's fifth M60 machinegun, which is usually carried on the command track.

The small squad does have other definite limitations: The Dragon gunners and the team leaders cannot fire their primary weapons and their M203s at the same time; the amount of ammunition the squad can carry is

reduced because of its small size, particularly the number of Dragon missiles, 40mm rounds, and machinegun belts; and the platoon leader and squad leaders with their radios are not as mobile and tend to tire more easily than if they had someone else to carry those sets.

Understrength mechanized infantry platoons can perform many missions ranging from dismounted patrols and ambushes to mounted attacks. But the platoon leaders must know how to adapt their small units to the changing situations in which they will find themselves. By properly tailoring their platoons and deploying their most potent assets, they can use the inherent flexibility of the mechanized platoon to its fullest advantage.

LIEUTENANT MICHAEL S. HACKNEY, a 1979 ROTC graduate of the University of Alabama, has served as a mechanized infantry platoon leader and an antitank platoon leader. He is now a brigade S3 Air in the 3d Armored Division. He has completed the Airborne and NBC Officer courses.

Modernized Line

CAPTAIN HARRY F. NOYES III

It is a pity the Maginot Line has given fixed linear fortifications such a bad name, because new technology now makes it possible for such fortifications to contribute immeasurably — perhaps decisively — to the defense of western Europe against Soviet attack.

Needless to say, I do not envision a literal reconstruction of the pre-World War II French system of concrete caverns and heavy guns.

What I am proposing is that ultra-modern technology — in the form of a semi-automated complex of anti-tank guided missiles and antipersonnel mines — be combined with such ultra-traditional shelters as holes in the ground to create a thicket of depth that any Soviet invasion force would have to penetrate.

This proposed new line, which for want of a better term we can call the "Modernized Line," would differ

from the Maginot Line in two respects:

- It would require relatively few troops and small amounts of equipment and money. Thus, it would supplement, not compete with, the conventional mobile forces upon which our defenses would primarily and quite properly depend.

- It would not generate a defensive mentality. Because it would never be intended as the primary means of

defending western Europe, its very nature would discourage any such notion. It would be a low-cost, attritional barrier that would deprive the Soviet invaders of their most important offensive advantages — the fast start and early momentum — and thus expose them to early counterattack by armored and mechanized infantry forces.

The Modernized Line would consist of a belt of concealed, unmanned antitank guided missile (ATGM) positions several kilometers deep and running all along NATO's eastern border, with its heaviest concentrations facing the most likely invasion routes. The widest possible variety of concealment modes would be used — building basements, phony structures, parked vehicles, haystacks, tree-top nests, and camouflaged or pop-up ground sites.

Each ATGM would be controlled from a distance by soldiers sheltered in bunkers hundreds of meters from the actual emplacements. Coaxial television cameras would survey the defended terrain and provide the gunner with aiming information, while a redundant system of wire and secure radio links would carry the proper firing commands.

Fire-and-forget technology would improve the system's effectiveness, but there is no reason why the soldiers could not control wire-guided missiles through their TV monitors, if necessary. The effectiveness of the gunners should be very high, because suppressive fire would have virtually no psychological effect on their remotely situated and well-protected shelter. Only a direct hit on a TV camera or a weapon, or rapid and effective smoke dispersal, would save the target. Ground laser designators could also be used to make the system even better.

The ATGM emplacements could be protected from dismounted infantry assault by thickets of command-detonated antipersonnel mines on all sides, which could also be controlled from the bunkers. In any case, even a successful infantry assault would represent a victory for the system,

since any dismounted attack would diminish the enemy's momentum in the crucial early hours of an invasion.

In favored locations, the bunkers might also control command-detonated antitank mines emplaced in the roads, and the use of remote-controlled antiaarmor guns and rotary cannon should not be ruled out.

If well-designed, such a line could start knocking off enemy vehicles as soon as they crossed the border and could continue doing so for many kilometers into the interior. In fact, once the fact of an invasion was clearly established, there would be no reason why emplacement close to the border could not reach well across it to destroy follow-up vehicles. Moreover, remote-controlled strongpoints could be constructed at key locations far behind the border, using the same technology to inflict additional

This proposed new line would supplement, not compete with, conventional mobile forces.

punishment on the foe as he penetrated deeper into friendly country-side.

In addition, it would be technically feasible to use a slightly modified version of the same concept to create a new kind of maneuver force. For example, prefabricated strongpoints using the same technology could be taken to threatened areas by truck and swiftly dug in, using normal engineering resources, as the enemy approached.

One of the advantages of the proposed system would be its requirement for relatively small numbers of soldiers. One soldier could control a large number of ATGMs, for example, especially if fire-and-forget technology was employed. Too, each soldier might be made responsible for several geographically separated concentrations that would be unlikely to acquire targets simultaneously.

Such soldiers would not need to be highly trained, if we can trust the

claims we hear that anyone can learn to use modern ATGMs in a few hours. Certainly a soldier who can fire from the safety of a remote bunker does not need the same kind of "steeling" he would require to face suppressive fire. In fact, this might be an ideal way to use inexperienced draftees or individual ready reservists who had not been given much recent training. It would also be a good way to use established light infantry units whose training and discipline were not in question but whose equipment might not suit them for an effective role in a NATO contingency.

The demands of such a system would not require a lot of money. For the most part, it would call for off-the-shelf technology and off-the-shelf hardware. It would require thousands of ATGMs, a lot of electronics, and a substantial quantity of shovels and concrete. Nevertheless, the requirements would be small compared to most modern defense programs, and the potential return on the investment would be high — the destruction of large numbers of invading vehicles at slight cost in friendly lives, while quite possibly crippling the enemy's timetable and exposing him to decisive counterblows. The deterrent potential alone probably would be worth the cost.

Given the imbalance NATO defensive forces face in Europe, such a remote-controlled defensive line seems to be an option that is at least worthy of serious study. While it should never be regarded as the prime ingredient in NATO defenses, it could provide a major economy-of-force means to redress some of the imbalances. At a low cost in men and materiel, it could slow down an invading force and made it pay a heavy price, and thus reduce the pressure on the main battle forces.

CAPTAIN HARRY F. NOYES III, originally commissioned through U.S. Air Force ROTC at the University of the South, is now an Army Reservist serving as Public Affairs Officer of the 300th Military Police Prisoner of War Command in Michigan. He also holds a master's degree from the University of Hawaii and has completed the Information Officer Basic Course at Fort Benjamin Harrison.

CPT NOYES B. LIVINGSTON III



TOMORROW'S RIFLE

The United States infantryman has fought on many battlefields over the years, always doing his best on each with whatever rifle he happened to have at the time. And his potential battlefield continues to change and expand. Through the use of thermal energy, ground surveillance radar, night vision devices, and intrusion warning systems, detection and engagement ranges are increasing in distance but decreasing in time. As a result, the U.S. infantryman will no doubt eventually get a new rifle to carry into battle — and he will need it.

His present rifle, the M16A1, is a good weapon. It is well made, lightweight, and accurate at battlefield ranges. It is handy to shoot, and it disassembles easily. In fact, it is almost everything a marksman or a service support soldier could ask for. Unfortunately, though, it is not designed to fill the basic requirements of the soldier who has to stake his life on it, the infantryman. So we need to begin thinking now about what kind of rifle we would like to have to replace it. We must not leave it to chance, as we have sometimes done in the past.

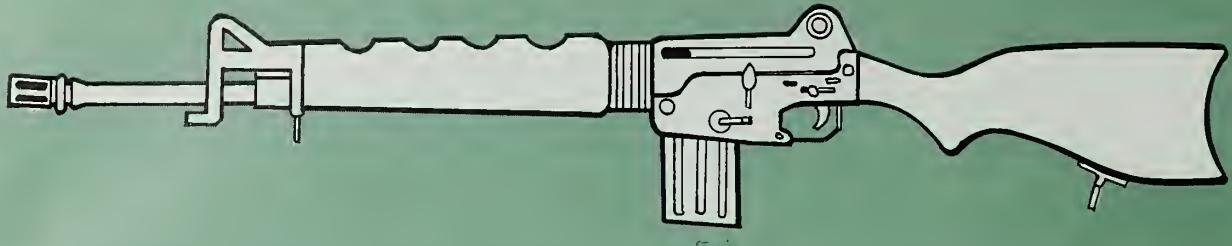
No matter how much warfare changes, though, the infantryman's war will still be brutal and intimate, and his rifle must be designed with that in mind. He must also believe in its capabilities and should be encouraged to use it. Besides shooting rapidly and accurately every time it is called on, an infantryman's rifle must be able to double as a club, a spear, or a crutch. It may also have to help make a litter, form part of a hasty ladder, or scoop out a hurried fighting position. In short, it must function when everything else has failed.

How should an infantry rifle be made to meet these high expectations? First of all, it cannot be encumbered with a carrying handle. We have all seen the classic example of a soldier running in training, one hand on his helmet and the other clutching his M16 by the carrying handle, like a commuter with his lunch pail chasing a departing bus. The handle makes the weapon easy to carry, but not easy to fire quickly.

A rifle must be built to fit naturally in a carry that lends itself to an attitude and position of readiness. The firing hand must grasp the small of the stock near the trigger, and the off hand must grab it slightly forward of its center of balance. A soldier should have to move only one hand to point and fire his weapon, not both.

Likewise, while a pistol grip may be necessary for a light machinegun, it is a liability on a rifle. Given a rifle with a pistol grip, a soldier cannot drop to the ground into the prone position without removing one hand from his weapon to break his fall. If he does not use the pistol grip, but holds onto the stock to let the butt of the rifle strike the ground instead, he must release his hold before he can reach the grip and shoot. The same soldier cannot cease firing and jump up to rush forward without removing his firing hand completely from his weapon to grab the stock and push off with it. It is extremely difficult to hold onto a pistol grip and get up another way.

Once up and running, this soldier cannot fire his remaining rounds and then lunge effectively at his opponent with his bayonet, or follow up with a butt stroke, without completely losing hold of his rifle with his



strongest hand. Although bayonet fighting may be a relatively small thing, when it is all an infantryman has left, it is everything, and close combat is no place for changing hands or coming in second best.

TECHNIQUES

A pistol grip also discourages the use of several important shooting techniques. With such a grip, a soldier's arm follows the angle of his firing hand when he is holding onto his rifle, causing his elbow to press against the side of his body while he fires. This eliminates the shoulder pocket that the weapon's butt is supposed to fit into to lessen the effect of recoil, steady the weapon, and keep it from slipping off his shoulder. Without a good shoulder pocket, it is hard for a soldier to maintain a firm stock weld with his cheek, to make his head move with the rifle as it recoils, and to keep his eye aligned with the sights.

A rifle should have a semi-pistol grip to improve marksmanship and to allow the soldier to hold it while running, leaping, and crawling and still have his firing hand in position to pull the trigger. It should also have a semi-straightline stock with a raised comb. The gas cylinder and operating rod should be above the barrel to reduce muzzle climb when the rifle is fired. Because the small of the stock would drop to form the semi-pistol grip, the rifle cannot have a buffer behind the receiver as the M16 does. There are many existing weapon designs, such as the FN-FAL, the AK, the AR18, the SG 540, and the Valmet M62, that can be modified to fit a traditional rifle stock.

In a rifle of this type, there would be no gas tube — as

in the M16 — to blow contaminants into the rifle's action or gas and excess lubricant into the firer's eyes. The bolt would lock fully until it was withdrawn by the operating mechanism, instead of using a delayed blowback principle, so varying qualities of ammunition could be used. The barrel would be heavy enough to support a bayonet, and its bore and chamber would be chrome-plated to resist corrosion and wear.

The rifle would share many of the beneficial features of the M16 and its contemporaries. The receiver would be split into an upper and lower group held together by takedown and pivot pins. This would allow placing the

No matter how much warfare changes, the infantryman's war will be brutal and intimate, and his rifle must be designed with that in mind.

rear sight at the back of the receiver, instead of at the front, by doing away with a bolt cover like the one found on the AK. This placement would permit using a rear sight aperture and a longer sight radius.

The lower receiver group would incorporate a sturdy integral magazine well and a winter trigger guard that would swing forward against the magazine when released. It would accept M16 aluminum or nylon magazines and would have all the weapon's controls accessible from the firing position. The selector lever would be manipulated with the firing hand thumb, and the magazine catch button would be worked by the trigger finger. The bolt catch would be released by the thumb of the loading hand after a loaded magazine was inserted. When the firer pulled back on the charging handle to lock the bolt to the rear, the bolt catch would be engaged with the firing hand thumb.

EJECTION

The upper receiver would have a covered ejection port on its right side and a charging handle fixed to the bolt carrier on its left. There would be no bolt forward assist on the receiver as the charging handle could be pushed forward to close the bolt. Placing the charging handle on the left side would allow the action to be cycled from a





firing position without the firer moving his firing hand or the weapon, as must be done with the M14 or M16. The charging handle would be at the left front of the receiver where it would not strike the non-firing hand. Its motion would be hidden from the firer's view by its speed and by the rear sight's elevation drum, which would also be on the left.

The rifle would be a little longer and slightly heavier than the M16. It should fire at a moderate cyclic rate from the closed bolt position with the bolt remaining open after the last round was ejected. Automatic fire should be limited by a 3- or 4-round burst control mechanism. It would have a concave recoil pad to hold it in place during automatic fire, and it would accept an M16 clothespin bipod.

The new rifle's flash suppressor, sling swivels, bayonet, bayonet stud, and front sight assembly would be the same as those on the M16. Its rear sight would be similar to the one on the M14. The fiberglass stock would be made like the M16's, and the easily gripped triangular handguards would be held on with a slipring in the same way. The stock should not be constructed to fold or collapse because that feature would make it less rigid. In addition to the standard 20- and 30-round M16 magazines, a short magazine that fits flush with the bottom of the magazine well should be issued for civil disturbance and ceremonial duties.

Many excellent weapons made by friendly nations, and some by not so friendly ones, are available that we can

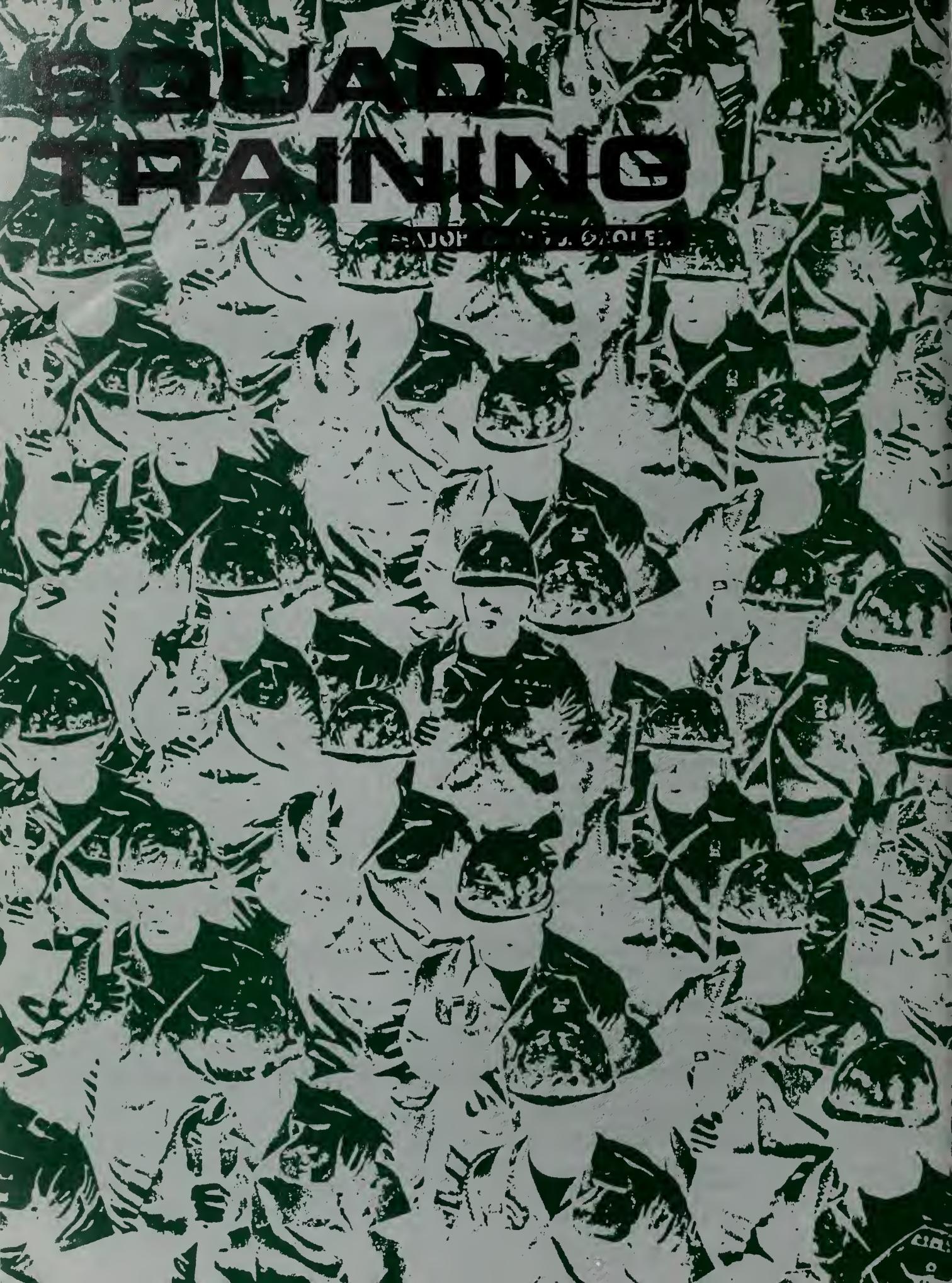
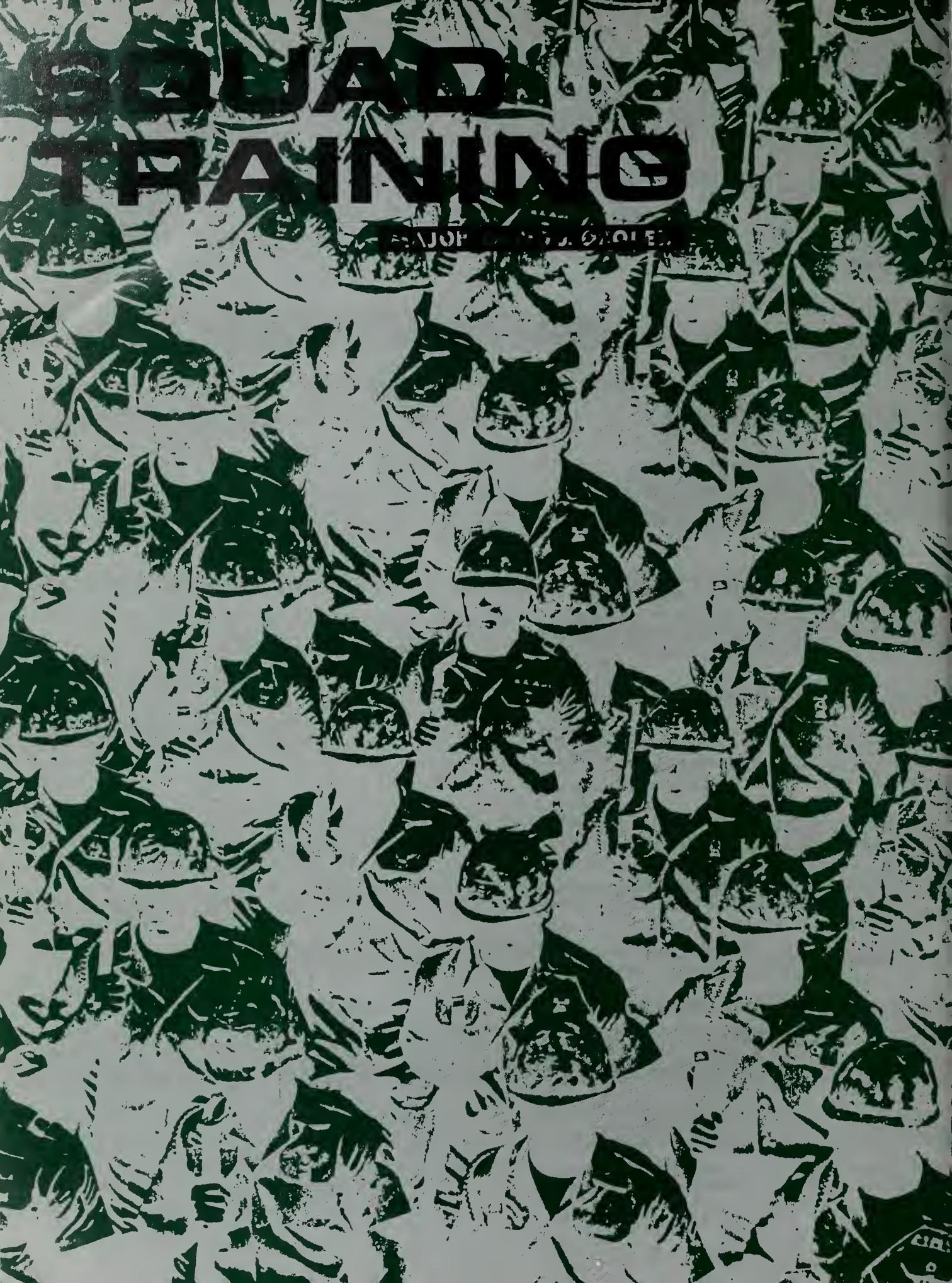
examine and test during the process of developing our own rifle. It is important to keep in mind that our rifleman does not need the most sophisticated design possible, one such as the Austrian STG 77, the French MAS, or the Swedish MKS, but he does deserve an infantry weapon that fits the conditions under which he must fight.

This proposed rifle is offered to support, not replace, the squad and platoon automatic weapons. It would first serve the rifleman with aimed semiautomatic or limited burst fire. Its adoption would result from the recognition that infantry combat is more than a "mad minute" fought by individuals. An updated yet traditional rifle would reaffirm the infantryman's role and signal a return to the tactics of soldiers fighting together. Fire superiority would become the product of superior fire by the unit, not random fire by its members.

If we begin now to plan for the rifle of the future, perhaps when the time comes for a quick decision on a replacement for our present rifle, we will have the right one waiting in the wings.



CAPTAIN NOYES B. LIVINGSTON III is a company commander in the 49th Armored Division, Texas Army National Guard. He served four years as a U.S. Navy enlisted man during the 1960s and is also a former enlisted man in the Texas Army National Guard. A graduate of Southwest Texas State University, he was commissioned from the Texas State OCS in 1975.



In an age of increasing specialization, consolidated training conducted at the company or battalion level, or even higher, occupies more and more of the training time available to an infantry unit. In an effort to ensure that the limited number of experienced specialists assigned to his unit will have the greatest effect on training his soldiers in their critical skills, the commander devises a training program in which the best qualified trainers within the unit teach their specialty to as wide an audience as possible.

This approach may appear to solve many of a unit's short-term training problems. But by removing the responsibility for training from the junior leaders in the chain of command, this over-reliance on consolidated training may actually cause more long-range problems than it solves.

Consolidated training ignores two key military leadership maxims: that the leader is responsible for everything his unit does or fails to do, and that any mission is best accomplished at the lowest practical level. These maxims are satisfied best when training is conducted at platoon level, or even better, at squad level. Because such training also offers a unit an opportunity to develop leadership at the lowest and most important levels, the quality of its training improves in the process.

One of the problems with consolidated training is that it demotes the subordinate leader from his position of leadership and makes him a kind of administrative assistant. In that role his primary responsibility is to get his troops to a centralized training location and then to check occasionally to make sure they are at least moderately attentive during the instruction. Sometimes he may be called upon during the practical exercise portion of the instruction to serve as an assistant instructor, supervising part of the class. But even then there may not be any of his own troops in the group. Often he is even further demoted and becomes, like his soldiers, just another student.

RESPONSIBILITY

This demotion can seriously diminish a squad leader's effectiveness, for while the MTOE sees him as a staff sergeant with perhaps six to ten years of experience, he is much more likely to be a junior sergeant, or perhaps even an acting sergeant who recently was just a member of the squad himself. But if he is to function effectively as a true squad *leader*, in the eyes of his men at least, he must be vested with the authority to lead the squad as well as with the responsibility for leading it. Unless he is given an opportunity to develop and display his leadership talents, he will probably continue to be a peer to them rather than a leader. Besides, denying him the chance to plan and conduct a significant portion of his squad's training also denies him the opportunity to sharpen the leadership skills he needs to become a senior NCO, and it presents an obstacle to the development of the squad as a functioning team.

Another drawback to consolidated training is that it takes away from a squad leader the responsibility for training his squad. If a task is taught at a higher level, it is almost impossible to hold a squad leader accountable for his squad's performance of that task during subsequent applications. A possible danger is that, since he is not likely to be held responsible for that particular task, the squad leader may neglect it to concentrate instead on functions that will directly affect what he sees as his designated responsibility. He may neglect, for example, important technical functions that are often taught at battalion level, such as Dragon gunnery, even though these functions may be essential to the accomplishment of the squad's overall combat mission. After all, the squad leader may reason, they have experts at battalion to handle Dragon training.

The counter-argument here is that the squad leader may indeed lack the necessary training and experience to conduct instruction for his squad on such a technical weapon as the Dragon. But if the battlefield of the next war turns out to be as it is now envisioned — a decentralized one with small units fighting independently — that same squad leader is not going to have an opportunity to consult the battalion's Dragon experts for advice. And if he has not gained the skills necessary to direct the use of all of his weapons in training, he certainly will not be able to develop these skills under the added pressure of combat.

The responsibility of the senior leaders of a company and of a battalion, then, is not just to direct the training of the individual soldier. It is to ensure that their junior leaders develop all the skills they need to conduct the training the squad has to have to accomplish its combat mission. This approach to readiness requires the establishment at the company level of a comprehensive non-commissioned officer development program in which the junior NCO first masters the various squad tasks so that he can later teach them to his men. Within this training structure, the company officers and the battalion experts can most effectively pass on the technical information they have mastered in the schools they have attended by imparting their knowledge to a cadre of leaders who will deliver it in small classes to the individual soldier.

IMMEDIATE RESULT

The immediate result of this approach to training is that the squad leader truly serves as the *leader*, totally responsible for his squad's performance in every aspect of training. He is given the opportunity to train his own troops and must always be ready to account for their performance. Since he brings to the squad the knowledge he has acquired both through his own experience and through his unit's NCO training, he comes to be regarded as an authority on the subject. Then, as the unit's trainer and leader, he can personally see that his squad meets the standards of performance he and his commander have set for it. He cannot use the familiar excuses for squad

failure, when, for the most part, he and he alone has conducted his squad's training.

A corollary benefit of this approach to training is that a person never masters a subject as thoroughly as when he is required to teach it. In consolidated training this benefit is offered only to the few instructors who do the actual teaching. But in most cases, these instructors are already masters of the task, and most of them have little contact with the soldiers who routinely perform the task. But if each squad leader becomes a proficient instructor in the subject, the unit's expertise is greatly expanded, and a qualified instructor is always available for the soldiers who must perform the skill in which he has been trained.

Another advantage of squad-level training is that it enables a unit to tailor its training to the different levels of training the squads need. Consolidated training assumes that all the students share a common starting point and that all will master the task at the same rate. Further, such training is necessarily oriented toward the lowest level. But the various squads usually do not start with identical training or experience, and nothing is more

One of the problems with consolidated training is that it demotes the subordinate leader from his position of leadership and makes him a kind of administrative assistant.

boring to a soldier than to be dragged through training that he has already mastered. Likewise, nothing is more frustrating to a conscientious soldier than undergoing training that assumes he is qualified in a skill he has not yet mastered. The person best able to assess a squad's strengths, weaknesses, and state of readiness is its squad leader. Therefore, he should be the one who ultimately decides, within the limits specified by his unit commander, how much time he should spend on each of the unit's training objectives and what approach will be most effective in training his troops.

This training philosophy does not reduce the role the company commander and the platoon leaders play in directing the unit's training. They must establish the objectives and the standards that the squads must meet, provide the squad leaders with the assets they need to achieve those standards, and see that the standards they

have established are met. Additionally, they must design and conduct the training of the junior NCOs and monitor their effectiveness as trainers and leaders. The squad-level approach to training thus allows the officers and NCOs to return to the traditional relationship in which the officers plan and inspect the unit's activities, and the NCOs implement those plans and prepare the unit for the commander's inspection.

Finally, conducting training at the squad level develops

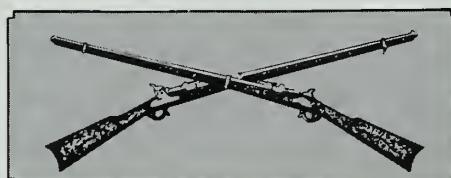
If a squad leader is to function as a true leader, in the eyes of his men at least, he must be vested with the authority to lead the squad as well as with the responsibility for leading it.

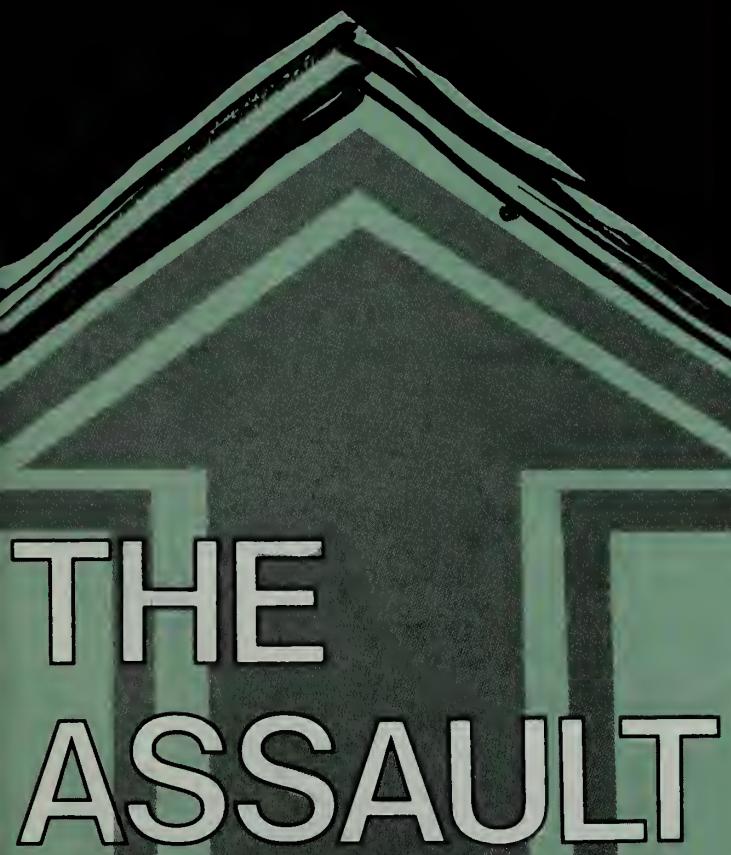
a sense of squad identity and teamwork. Too often in the modern Army, the members of a squad live apart and, except for formations and field duty, have little more than an administrative identity as a squad. But when most of their daily activities involve squad exercises under a strong, central leadership figure, a sense of common purpose emerges from the training and carries over into all aspects of unit activities. The squad becomes a functioning body, aware of its strengths and weaknesses, confident in its abilities, and held together by an esprit that is derived from effective small-unit leadership.

For some tasks consolidated training may be a practical approach, and large-scale unit training is logically required for such missions as the rifle company in the assault. But if a commander wants to develop among his junior leaders the leadership necessary to ensure the successful completion of their small-unit missions under all conditions, and if he wants to guarantee the most effective training of his soldiers in their individual skills, he must place his squad leader firmly at the functioning center of his unit's training program.



MAJOR DAVID J. OZOLEK, now assigned to the National Training Center at Fort Irwin, California, was formerly an Assistant Professor of English at the U.S. Military Academy. He holds undergraduate and graduate degrees from John Carroll University and has completed the Infantry Officer Advanced Course. He also previously served as an advisor in Vietnam and as a platoon leader and a company commander at Fort Carson.





THE ASSAULT

CAPTAIN PAUL L. CONWAY

The infantryman's primary mission is to close with the enemy and either destroy or capture him. But this is easier said than done, because the assault — actually closing with the enemy — may be the most difficult task an infantryman is called on to do. He must leave whatever protective cover he has had, expose himself to the enemy's fire, and move directly against his foe's position, often a stoutly defended position. Mechanized infantry units have the additional problem of deciding whether the situation calls for them to dismount, and if it does, when and where they should do it. It takes a lot of courage, discipline, teamwork, and leadership to do all these things and do them right.

Unfortunately, though, too many of our infantry squads and platoons are not given the kind of assault training they will need to carry out this most difficult of all missions. In fact, far too many of our infantry leaders neglect the small details that can greatly influence their soldiers' chances of surviving an assault. As a step toward remedying this situation, these leaders must first understand the tactics of an assault, and then they must see that their units receive adequate training in carrying out these tactics.

In Europe, the average Soviet-style defensive position consists of a series of mutually supporting strongpoints. These have both individual and crew-served weapon positions linked by communication trenches, and they usually have dug-out places behind the forward trench lines in which armored carriers and tanks can be positioned. Often, the defensive positions are protected by minefields, barbed wire obstacles, and antiaarmor ditches designed to channel an assaulting force into defensive fire zones.

This kind of defensive position can be adapted to fit almost any kind of terrain and it can be a tough nut to crack. But mechanized infantry units can crack it if they use some common sense and follow the principles laid down in such field manuals as 71-1, 71-2, and 7-7.

For example, we teach our mechanized infantry units to remain mounted during an assault, unless the terrain prohibits it or the defender's antiaarmor fire cannot be suppressed. But common sense tells the commander that the absence or presence of mines probably will be the most important factor he will have to consider in deciding whether his unit should dismount. Certainly it would be a suicidal gesture on his part to order his vehicles into an enemy minefield that was covered by fire.

Even a suspicion that a minefield might be present undoubtedly will slow a mounted assault. And because a minefield cannot be suppressed by fire, most mechanized infantry final assaults against defended positions will be dismounted ones. In these cases, the infantrymen will have to dismount a considerable distance from their objective and remain there until the defensive minefield can be breached. If the situation develops favorably, the carriers might be used to move the infantrymen up to the minefield gaps.

At the same time, the defending force's fires must be suppressed; if its members are too stunned or frightened to shoot back accurately they will lose the edge their



prepared positions have given them. Keeping the opposing force down until the assault platoon gets into the defensive trenches is especially crucial.

Artillery fire is particularly useful in this regard. It can drive the defenders into their dug-outs, kill or wound those above ground, cut through some of the wire obstacles, and use smoke to give the assault force some concealment. Unfortunately, artillery fires must be lifted when the assault unit gets within 200 to 300 meters of the first enemy trenches.

Mortars can be used to thicken artillery fires, to lay smoke, and to hinder enemy movement in areas that the artillery units cannot easily reach. They can also be used to cover the assault troops when the artillery fires must be lifted; mortar fires do not have to be lifted until the first troops get to within 100 meters of the enemy's trenches.

Tank guns and other armor-protected weapons, firing directly on the point where the assault troops will enter

the strongpoint, may constitute the most important part of a fire suppression plan. TOWs may be useful for knocking out bunkers and dug-in armored vehicles when the firing starts, but the smoke, dust, and haze raised by the fires of the other weapons may reduce their accuracy, at least with the current equipment. They may be better used in overwatch positions to protect the flanks of the assault unit, or as reinforcements once the strongpoint has been taken.

ASSAULT FORCE

The assault force should be no larger than a platoon. Thus, if a company team of two rifle platoons and a tank platoon is sent against a strongpoint, the tank platoon can be the direct fire suppression force; one rifle platoon can breach the obstacles and minefields while its carrier

weapons help the tanks with suppressive fire; and the other rifle platoon can act as the assault force. Once it has completed its mission, the breaching platoon should be prepared to reinforce the assault platoon.

The assault platoon must get into the enemy's trench line as fast as possible. Every second it delays from the time the suppressive fires lift until the first man enters the trenches gives the defenders more time to recover from the shock of the fires.

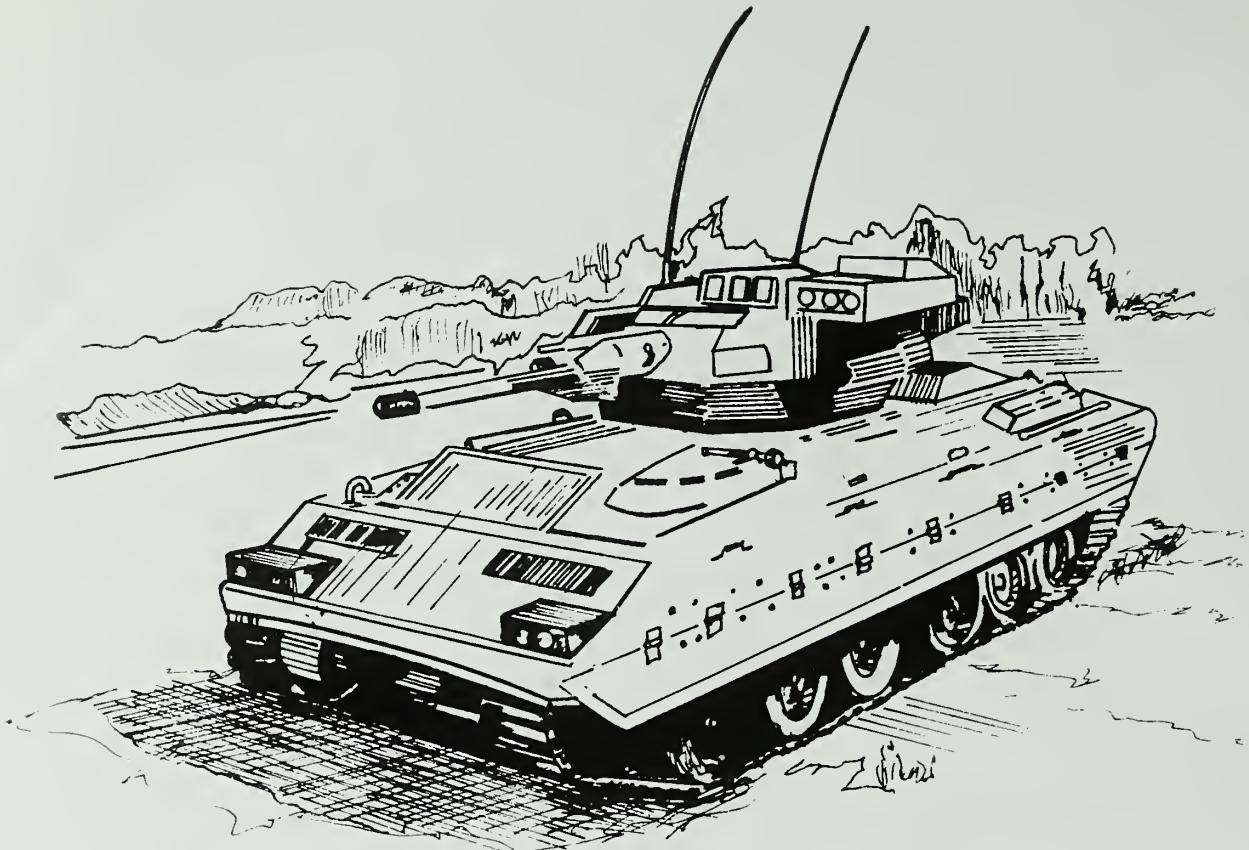
The assault unit must move rapidly through the breach in the obstacles and then fan out to move against the defenders in the trench line. All the soldiers who are not rushing should fire at known or suspected enemy positions to their front. If the enemy's fire is light, a straightforward charge into the first trench line may be the best way to get the platoon into the enemy's position. Once inside the trench line, the platoon should use the standard trench-clearing procedures shown in Field Manuals 7-7 and 7-8.

The platoon leader may be able to position some of his M60 machineguns to cover his assault, but it is not likely that he will find many good machinegun positions close to the defender's trench line. Accordingly, he should send only one or two of his machineguns with the assault squads and keep the others on the carriers to be brought up later. Extra LAWs should be taken along to be used against bunkers. (The Dragons, which are not assault weapons, should remain on the carriers along with extra equipment such as tripods and field telephones.) Thus, each dismounted soldier in the assault squads should carry his individual weapon, some loaded rifle magazines, hand grenades or M203 rounds, possibly a LAW, an entrenching tool and some water, but little else.

Semi-automatic fire should be stressed, because clearing trenches can use up tremendous amounts of ammunition in a short time, and resupply may be slow.

Suppressive fire must be closely controlled during the assault. Although indirect fire will be shifted by the com-





pany team commander before the assault platoon gets inside the strongpoint, the assault platoon leader should also have a signal for lifting it. A flare is ideal for this purpose.

Control of direct fire is more difficult. Tank fire can be shifted or lifted altogether by flare signal, but the best way to control the supporting machineguns is by simple SOPs, such as the following:

- The assault platoon marks its position by throwing smoke grenades as it moves forward, and the machinegunners aim 50 to 100 meters on either side of the smoke.
- The assault platoon fires 40mm smoke rounds either to identify specific machinegun targets or to mark the platoon's safety limits.

Depending on the size of the strongpoint, the assault platoon may be able to secure only a small part of it, especially if it has to drop off teams to secure communication trenches. Other platoons will have to be sent in to keep the attack going and to completely reduce the strongpoint.

Meanwhile, the assault platoon should organize itself to defend its position. Squad and fire team leaders should redistribute ammunition and account for their men. The platoon's carriers should rejoin the platoon as soon as possible, bringing up more ammunition and other supplies and equipment.

Although these tactical concepts are neither new nor complex in design, they are not simple to do, and infantry platoons, to maintain their proficiency, must constantly

practice fire and movement and trench-clearing drills.

To begin with, as a basis for these drills, the soldiers must be well trained in the individual skills they will need on the battlefield. They must know, for example, how to wear their load-bearing equipment properly, with everything tightly secured. (Follow almost any platoon during a live-fire exercise, and you will probably pick up dozens of items of individual equipment.)

Many soldiers do not know how to change their rifle magazines quickly. They need to work on this relatively simple skill every chance they get so that they need only a quick glance to make sure the magazines are properly inserted into their rifles. And they should not waste time trying to put their empty magazines back into their ammunition pouches; during live-fire exercises they can stuff their empty magazines in the pockets of their field pants or inside their shirts.

Above all else, each soldier must be taught to think for himself during an assault, because his squad leader cannot think for him. If a soldier is not well trained in the proper assault techniques, he will tend to lie still until his leaders tell him what to do.

Fire and movement training, also called battle drill, is probably the single most crucial element in assault training. It can be done either in garrison or in the field during collective training.

Initially, a platoon leader should pick a piece of open terrain — a parade field is ideal — close to his barracks area. He should review the individual skills and then have

his squads practice battle drill exercises, separately at first and then together, with the squad leaders moving their units on his command.

As the platoon improves, the platoon leader should move his unit to more difficult terrain and add blank ammunition and pyrotechnics to his exercises. Although the training should be done as often as possible, no one training period should last for more than three hours.

Trench clearing is another of the skills that a unit has to work on. As mentioned earlier, Field Manual 7-7 covers trench clearing in detail. And while units can build sand tables or outline mock trenches with engineer tape, these expedients are not as good as having a full-scale, Soviet-style strongpoint available. Although a strongpoint of this kind is expensive and takes time to build, once built it becomes a tremendously effective training aid. Squads and platoons can practice their trench-clearing techniques on it as well as their other assault exercises. The use of opposing forces and MILES can also do much to increase realism during the training exercises.

Field Manual 7-7 also describes methods that can be used to clear minefields and other obstacles. Here, again, platoons can practice these skills almost anywhere. For example, tin cans can be buried in minefield patterns, and clearing squads can be required to find and mark them. To make the best use of the available time, each squad can be given a lane to clear. This exercise is well worth doing at night. And, if possible, demolition ranges should be run jointly with engineer units.

Finally, live-fire assault exercises are necessary to give the platoons the "feel" of an actual assault. In most cases, some additional weapons training will probably be needed before the actual exercises take place.

For instance, a unit's caliber .50 machinegunners must know how to fire accurately at medium to long ranges — 500 to 1,000 meters — if they expect to be able to lay down any effective kind of suppressive fire when the time comes. Unfortunately, most posts do not have adequate machinegun ranges, and in peacetime our machinegunners rarely fire at ranges over 400 meters.

Tank gunnery ranges (especially those for Tables VI-VIII) are excellent for this kind of training. The APCs should be in hull-down positions when their guns are fired, and they should change positions frequently. If tank gunnery ranges are not available, mortar and ar-

tillery ranges can be used, but any movement forward of the firing points is usually forbidden. This type of firing might be combined with a mounted firing exercise to give the soldiers practice in firing from their carriers while they move along.

After the platoons have completed their additional weapons training and have mastered the battle drills, the live-fire assault exercises can be held. They can be as simple as or as elaborate as the senior commander wishes. All of them, though, should include two main features: They should emphasize fire and movement, and they should feature some kind of fire support. Thus, an excellent live-fire problem can be run with a unit's organic mortars as the only available fire support weapons. At the same time, they must not overdo fire support, because it can require the various unit commanders to spend most of their time planning for and controlling the fire support means instead of paying attention to the actual assault.

Leaders should not expect things to work well the first time they conduct assault live-fire exercises. Most platoons tend to move hesitatingly and with long pauses between firing. Some soldiers run out of ammunition before they reach their objective, while others fire only sporadically. A number of soldiers always seem to fumble with their magazines as they try to reload their rifles. But with appropriate attention to individual skills and with some practice in battle drills and trench clearing in advance, assault live-fire exercises can be executed successfully — and they *should* be.

The assault, in the past, has received less attention than it deserves, and all infantry commanders must do a better job in training their soldiers to carry out this most difficult of all infantry tasks. If they do not, their soldiers simply will not know how to do it when the time comes.

CAPTAIN PAUL L. CONWAY, now assigned to the Military Traffic Management Command, Transportation Terminal Group, Europe, previously served with armor and mechanized infantry units in the 1st Cavalry Division. He is a 1972 ROTC graduate of Utah State University and has completed the Infantry Officer Advanced Course and the Airborne, Ranger, and Motor Officer courses. He also wrote "Rifle Marksmanship," which appeared in the July-August 1978 issue of INFANTRY.



FAME IS A FLEETING THING



L. VANLOAN NAISAWALD

The quiet darkness of the night was suddenly shattered as a storm of incoming artillery shells shrieked and then exploded with deafening crashes, throwing up masses of dirt and stone. Flares popped and small arms fire erupted along with the crunching detonation of hand grenades. Wild screams and yells — in both German and English — joined the racket. It was 0230, 4 November 1917, and a German combat patrol was attacking the outpost line of Company F, 16th United States Infantry.

The fight lasted about 10 minutes before the German patrol withdrew, reaching its own lines seconds before Allied artillery fire came crashing down just in front of the American position. Minutes later, American officers and noncommissioned officers began sorting out the damage: a sergeant and 10 men were missing, 11 others were wounded, and three were dead. Corporal James B. Gresham's jugular vein had been severed; Private First Class Thomas Enright had been shot through the heart; and Private Merle D. Hay's skull had been crushed by a rifle butt.

Within 48 hours, and for some years afterward, the names of Gresham, Enright, and Hay would be recognized by a generation of Americans that now has almost disappeared. As the first Americans killed in action in World War I, they were accorded heroes' treatment. Today, they are virtually unknown.

Their story really begins on 6 April 1917. On that day the United States had declared that a state of war existed with Imperial Germany. At the time, the 16th Infantry Regiment was in garrison at Fort Bliss, Texas, its ranks far below an authorized war strength total of 3,100. Still, its levels of conditioning and training were probably pretty solid, because the unit had just returned from duty with General John J. Pershing chasing the forces of Pancho Villa in Mexico. Gresham and Enright had taken part in that expedition. (Gresham, who listed his hometown as Evansville, Indiana, had enlisted in the Regular Army at Jefferson Barracks, Missouri, in April 1914. Enright, born and raised in Bloomfield, Pennsylvania, a suburb of Pittsburgh, had joined in November 1915.)

Enright, apparently, had come from somewhat unfortunate circumstances. Both his mother and father had died by the time he was 14, so the elder of his two sisters took him in, and he lived with her until he joined the Army.

Exactly when young Merle D. Hay of Glidden, Iowa, joined the 16th Infantry is not clear. The extant records show that he enlisted at Fort Logan, Colorado, on 11 May 1917. A post-war newspaper account said that Hay and a number of his hometown buddies had volunteered in the initial rush. If Hay was sent directly to the 16th Infantry at Fort Bliss, it is probable that he had been barely uniformed when the regiment was ordered to move by train on 3 June for Hoboken, New Jersey, bound for France.

The move was done with much secrecy, and it was dark on the evening of 8 June when the long line of sleeping cars squeaked to a halt outside the city. If there had been any doubt in anyone's mind as to where the train was headed, it was gone now.

The urgent need to show the American flag, to march units of big, young, eager American soldiers before the eyes of a war-weary, partially demoralized, exhausted France had been recognized early by the War Department. To that end, the Department had hurriedly typed up plans and orders to quickly combine existing Regular Army units into the 1st Infantry Division — the Big Red One — and to ship it to France beginning in June 1917. The division's four infantry regiments were to be the first contingent, since their 12,400 bayonets would be flashing, visible evidence that American combat troops soon would be available to shore up depleted British and French divisions.

As the long troop trains neared Hoboken and then stopped, Gresham, Enright, and rookie Hay, along with their companions aboard the trains, most likely peered from the windows, eyes straining to catch sight of the glimmering lights of New York City in the distance.

With darkness on 9 June, the men were ordered off the cars and into ranks, and then marched along ill-frequented and sparsely inhabited side streets to the docks. By 10 June, all were aboard transports, which, surrounded by puffing and tooting tugs, were soon pulled from the piers out into the river and down into New York's lower bay.

Sixteen days later, on 26 June, the transports backed down in speed and came to a stop off St. Nazaire, France. The word came down that Company K, 28th Infantry would be the first unit to land.

The Americans were slow in getting ashore, because there weren't enough docks available to hold them. In fact, it would take from the 26th till the 30th before all were ashore. The first landings were made, to the surprise of the American soldiers, with little or no fanfare, crowds, or celebrations. The local citizens simply didn't know they were coming!

If Gresham, Enright, and Hay, and the rest of Company F, 16th Infantry, had any ideas about lots of time off to see the sights of Paris and the French countryside, they received a rough shock. A rigid, exhausting training schedule began at once. There was only one short break in the schedule, and that came on 4 July.

TRAINING

The training plan adopted by General Pershing, now commander of the American Forces in France, called for the 1st Division to spend its first month in acclimatization and in training the individual soldiers, many of whom, like Hay, barely had had time to learn how to march before they found themselves in France. Squad, platoon, company, and rudimentary battalion drills also had to be crammed into that first month. During the second month, the battalions would be fed into the lines, under French control, for actual combat indoctrination, and in the third month the division would undergo division-level training.

In that first month, then, much had to be done. The division had arrived not only lacking in training at all levels but lacking in everything except the fine Springfield



rifles the infantrymen carried on their shoulders. In fact, Pershing's entire force, for the rest of the war, would be like a poor, third cousin borrowing for its day-to-day existence from the French and the English.

Not only did men like Private Hay have to be taught the rudiments of drill and rifle marksmanship, he and his corporals, sergeants, and company officers had to learn how to operate and maintain a whole bag of non-American weapons — the heavy French Hotchkiss machinegun that was fed by strip clips, the tinny-looking French Chauchat light machinegun, the British-style Mills bomb or fragmentation grenade, the stubby little 37mm or one-pounder infantry cannon.

New tactics had to be learned: how to dig a trench and defend it, how to survive a pre-attack bombardment, how to clear away barbed wire, how to maintain cohesion in an over-the-top infantry attack, how to wear and use the gas mask, and many other aspects of then-modern trench warfare. Squad leader Gresham no doubt had as much to learn as did assistant squad leader Enright and rookie Hay and the rest of Company F. All suspected they'd be going into the line before Thanksgiving.

To some it came sooner, on 20 October. The first battalions of each of the division's four regiments were ordered into the lines, sandwiched between and supported by veteran French units.

The men of Company F, part of its regiment's 2d Battalion, knew their chance would soon come, probably in a week or ten days. As it turned out, there wasn't that much of a wait: The warning order to the battalion came

down from division headquarters on 23 October; the battalion was to begin moving 1 November and was to replace the 1st Battalion in the line the next night.

The sector had remained quiet during the period the first battalions had held the lines. There had been occasional rifle shots and sporadic artillery exchanges as each side checked and rechecked their gunnery registrations. The first American soldier had been wounded on 23 October, but happily had survived. No German raids or attacks had marred the quiet.

RELIEF

It was unusually dark and cold the night of 2 November as the 2d Battalion moved up through muddy zigzag communications trenches to relieve the 1st Battalion. By midnight, the relief was accomplished.

For the men of Company F, the war was beginning for real. The tiring training days lay behind them; they were now to be tested under fire, even if they were in a so-called quiet sector where battered divisions were sent to rebuild and recover.

Quickly and quietly, Company F deployed onto a small bald hilly salient or bulge in the trench line near the little village of Bathelement. The position was called the "Artois center of resistance." The Americans, when daylight came, would be able to sneak a look at the distant Rhine-Marne canal. But at this moment the men of Company F knew almost nothing of their surroundings.

The first platoon was led into a trench called Est, facing northeast. Fifteen men were singled out in groups of five and assigned to three sentry posts called P1, P2, and P3, which were 100 yards ahead of Est trench. The trench itself was garrisoned by 20 men, divided into three groups. The second and third platoons were placed in trenches called the Boyau Nord position, facing north. Both flanks were covered by French machinegun detachments, and artillery fire support would come from French units with the 1st Division's batteries helping out. Control was strictly French; American tactical command stopped at the company level.

The relief completed and the positions manned, the men began adjusting themselves physically and mentally to their first hours in the trenches. They pulled their long heavy woolen overcoats about their bodies to ward off the cold. Many tried to get some sleep in dugouts or huddled on the firestep at the bottom of the trench. Only those on sentinel duty stayed awake, their eyes straining to pierce the blackness ahead, ears alert for any unusual noise in no man's land out front.

But no doubt many of those huddled in the trench or in the dugouts slept only a fitful sleep, a half-dozen, their nerves keyed for instant reaction. Not a man in the trench had ever pulled a trigger at a live German, or had even seen one, for that matter, other than a few prisoners working in the rear areas. Feelings that night were no doubt a mixture of apprehension and anxiety, of fear and determination.

Then, at about 0230, the world seemed to explode about them. Company officers and sergeants yelled to the men to take cover in the deep dugouts; only the men on

guard were to remain above. These hugged the shelter of the trench walls, hardly able to venture a look over the top in the face of the heavy shelling.

The German fire shifted and began falling on the flanks and the rear of the company's position, effectively isolating the American platoon in an intense box barrage. Now different-sounding explosions were heard out front in the protective barbed wire. Perhaps some of the Americans recognized them as coming from explosive charges on long poles that were shoved under the wire supports and detonated — bangalore torpedoes, they were called.

The next thing the stunned Americans heard and saw was a shower of German potato-masher hand grenades landing at Est trench and on the Boyau Nord position. Seconds later, dark forms in huge helmets leaped into the American trenches at the junction of Boyau Nord and Est trench. The few Americans at that point were overwhelmed.

The Germans then broke up into smaller groups and started fanning out right and left, fighting their way westward up Boyau Nord and southward to Est trench. The stunned Americans fell back. The German party working westward came upon an American sentinel, probably Private Hay, and killed him.

By now, though, the Americans were recovering, and rifle-toting Yanks swarmed out of their dugouts in the area directly behind. They stormed forward and the German raiders, not interested in this, began to withdraw.

Out in front, the three sentry parties had taken cover when the shelling began. Now, as the shelling shifted to the flanks and rear, the men came out of their dugouts



and began making their way toward the noise of fighting in Est trench. They stumbled into the Germans who were returning, prisoner-laden, toward their own lines. A flurry of firing broke out — but then it was all over. American and French artillery fire began to crash into the open ground in front, but it was too late. After another ten minutes the night was again black and quiet.

CEREMONY

The next day there was a full ceremony for the burial of the three dead Americans. Later, the French would erect a monument to the men in the village of Bathelement.

Word of the deaths had passed with amazing speed. By 5 November, the next of kin had received the news in telegrams from the War Department. Newspapers seized on the story, and there was an immediate outcry to bring the bodies of the three fallen men home for interment.

But it was not until 1921 that the War Department began the repatriation of war dead whose next of kin wished their remains brought home. In the case of Gresham, Enright, and Hay, the choice, unanimously, was to bring them home.

The three bodies were shipped from Antwerp, Belgium, on the U.S. Army Transport *Wheaton* on 19 June 1921. Thirteen days later the ship docked at Hoboken and telegrams were sent advising the next of kin of their arrival and that the remains were being shipped to addresses provided by the War Department. The three caskets were then readied for shipment from Pennsyl-

vania Station, each escorted by a soldier in uniform from Company F, 16th Infantry.

Word of the event had begun to spread. The Governor of Indiana requested that Gresham's body be allowed to rest in state in the State Capitol for 24 hours before the final burial in the Locust Hill Cemetery in Evansville.

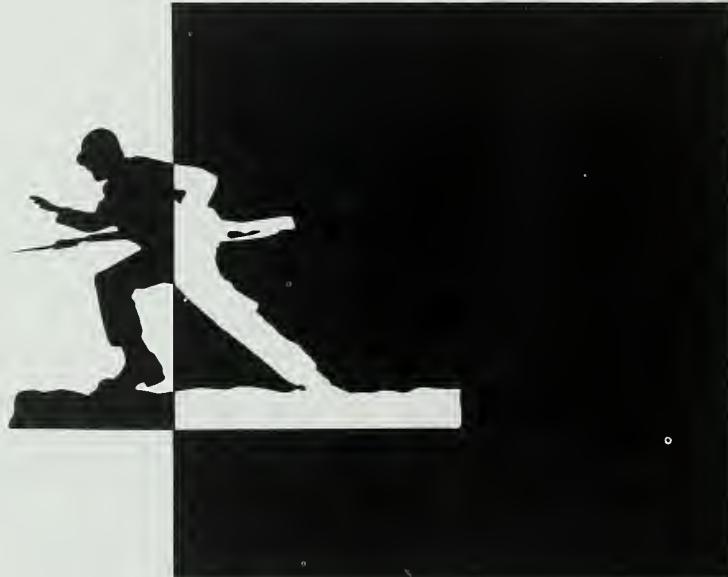
Enright's remains were transported to Pittsburgh where the body lay in state at the local memorial hall before being transferred to St. Paul's Catholic Church for services. A grand parade of veteran and civic groups then escorted the hearse to nearby St. Mary's Cemetery. The city of Pittsburgh officially renamed Prema Street — Enright's boyhood address — Enright Street, and a local theater was also given his name. Today, both are gone.

Hay's remains went to his home in Glidden, Iowa. The reinterment service there was attended by veterans of the Civil War, the Spanish-American War, and World War I, following a period of lying in state in the local American Legion headquarters. A wreath of flowers from General Pershing decorated the grave site.

Today there are probably few people who have ever heard of the names of Gresham, Enright, and Hay.

Fame is a fleeting thing. Tragic fame is even more fleeting.

L. VanLoan NAISAWALD, a retired U.S. Army Reserve colonel, is editor of *Army R, D & A Magazine*. He is a graduate of the Virginia Military Institute and holds a Master's degree from the University of North Carolina. He has written three books and numerous articles for publication.



TRAINING NOTES



Winter Training

LIEUTENANT COLONEL RICHARD A. DIXON

The objective of winter training is to teach soldiers to shoot, move, and communicate in the cold and the snow. But before mission training can be conducted in winter, the soldiers have to accomplish certain basic individual and collective tasks that are usually lumped together under the heading of winter survival training or cold weather indoctrination (CWI).

An understanding of the difference between winter mission training and CWI is a vital first step in planning effective winter training. Without a clear differentiation between them, the means may become the end. When that happens, units can find themselves spending precious field training time learning how to live in the cold instead of learning how to fight in it.

The best winter training, obviously, is conducted by Active Army units stationed in areas that have a distinct winter season. Unfortunately, many Army units, both Active and Reserve Component, are stationed in the southern half of the United States and have to travel farther north to conduct winter training. The challenge for the commanders of these units is to find a way to conserve mis-

sion training by cutting the time they have to devote to CWI without risking cold weather injury in the process. This means that their CWI must be preparatory training, training that should be conducted well in advance of the unit's scheduled mission training.

The problem is that while the content of mission training is spelled out in the appropriate soldier's manuals

Units have to learn how to live in the cold before they can learn how to fight in it.

and ARTEPs, laying out a program of instruction for CWI is not as clear cut, because there is no single source document for developing a CWI program of instruction.

Cold weather indoctrination should consist of eight tasks: Fitting, adjusting, and wearing individual cold weather clothing and equipment; hygiene and first aid; leadership; maintenance; ahkio loading and hauling; bivouac routine (tent drill); snowshoeing; and skiing. The last of

these, skiing, is the only task that requires a winter environment for skill training. The others can be taught in any climate any time the equipment is available. And units that do not have winter equipment on hand can plan to draw some early enough to conduct their preparatory training.

A good example of how this works is the way the 205th Infantry Brigade (Separate) of the U.S. Army Reserve prepares for its annual training. The brigade is scheduled for winter training in February 1983, and even in Minnesota where it is stationed, the unit will not have had enough winter weather before that time for comprehensive cold weather training. To prevent wasting mission training time at annual training, therefore, the unit began training in all the CWI tasks except skiing in August 1982.

As an example of the performance-oriented training conducted during the 205th's monthly training assemblies, during the first hour of each assembly, a rifle squad is required to move its loaded ahkio outside, set up its tent and yukon stove, then dismantle, load, and store the loaded ahkio. By the time the soldiers have



to do these tasks in the snow, they will have a set procedure for doing them.

The following training and evaluation outline should prove useful to any unit that is preparing for winter training:

Task 1: Fitting, adjusting, and wearing cold weather clothing and equipment. Individual clothing and equipment should always be issued at the unit's home station and issued early enough to make sure the troops have enough training in fitting and wearing their clothing before they are exposed to a cold environment. The first fitting session should be during the initial issue of clothing, and leaders need to check each man on more than one occasion later for proper fit and wear of his clothing.

Task 2: First aid and hygiene. These subjects must be taught early with refresher training just before the unit's winter deployment. Buddy systems, in which two soldiers check each other, should be established early and checked periodically.

Task 3: Leadership. The best trained soldiers can become casualties if their leaders place them in situations where they are needlessly exposed.

This means particular care must be taken during mission training in defense, ambushes, and any other training that requires troops to be relatively inactive for long periods of time. Leaders at all levels need to understand that "stand-around time" must be eliminated.

Two leadership techniques not found in the manuals are worth attention. Overheating is always a problem. Soldiers tend to wear too much clothing, particularly while they are on the move. This is because when they start out they are usually cold enough to wear their full kit. But, then, as they warm up from the exertion of moving, they either are not given an opportunity to strip down or are not inclined to do so. Once they begin to perspire, their chances of becoming cold casualties increase dramatically. One way a leader can prevent this is to have the men move out at a rapid rate for five minutes, then stop and remove their outer garments and adjust their harnesses. From this point on, the troops should move at a steady pace that is just fast enough for them to keep warm without overheating. During breaks, leaders should require their soldiers

to don their outer clothing.

The other technique involves establishing, as a standing operating procedure, the rule that, whenever units are ordered to halt, they are placed on 30-minute standby. This means that when they are ordered to move again, they have 30 minutes to get ready. This will prevent units from remaining at the ready while exposed to wind and weather. Too often troops remain immobile in an exposed position for long periods of time because their leaders expect orders to move immediately. The 30-minute-standby rule allows for the preparation of field expedient wind shelters and perhaps for the serving of hot drinks.

Task 4: Maintenance. The care and maintenance of weapons and other TOE equipment, as well as special winter equipment, must be taught before deployment.

Task 5: Ahkio loading and hauling. The ahkio, loaded with squad tent, stove, shovels, axe, and so on, is called the ahkio group. The composition of the load and the location of the items on the ahkio should be standardized. The ahkio group should be stored intact for ready access by the

assigned squad or section. Soldiers should practice loading, unloading, harness rigging, and hauling techniques prior to field deployment.

Task 6: Bivouac routine (tent drill). Units should practice establishing bivouac sites until all its procedures are standardized and can be accomplished quickly with no wasted motion. At least half of this training should be at night. The important things that should be stressed are that there should be no wasted motion, that every member should have assigned tasks, and that everything should be in its place. During winter, the time between an ordered halt and the establishment of a warm shelter is critical, and all troops should learn to stay busy during that time to prevent chilling.

Task 7: Snowshoeing. Snowshoeing takes little practice to master and can be taught on grass. Standard issue magnesium shoes are very

durable and can be used anywhere. The older wood and gut shoes are more easily damaged, but they, too, can be used on lawn grass, with care.

Task 8: Skiing. Attempts to teach skiing on anything besides snow — on straw, for example — have proved largely ineffective. For units not stationed in northern areas, ski training is generally impractical. Although the ability to ski provides a distinct mobility advantage for well-trained troops who can travel light, as long as troops are required to hand-haul ahkio loads, the maneuver advantage of skiing is lost anyway. Snowshoes are better than skis for hauling ahkios, and under these conditions skis are effective for local security patrolling and not much else. The program described in TC 90-11-1 requires about two weeks for training to proficiency on skis. Even units such as the 172d Infantry Brigade in Alaska and the 205th Infantry

Brigade in Minnesota usually limit ski proficiency to their scouts.

Victory on the winter battlefield presupposes the ability to use the environment as a force multiplier. The enemy understands this very well; he is trained and equipped to use winter conditions to provide a strong advantage over a less prepared force. The measure of our projected success during winter operations is how well our units can conduct their ARTEP tasks in the cold and the snow. And how well they conduct their ARTEP tasks may be dependent upon how well they have conducted their preparatory cold weather indoctrination.

LIEUTENANT COLONEL RICHARD A. DIXON is command advisor to the 205th Infantry Brigade (Separate), USAR, and formerly served as Brigade S3 with the 172d Infantry Brigade (Separate) in Alaska. A 1961 ROTC graduate of the University of Washington, he has completed the Command and General Staff College course. He has written other articles for publication on subjects dealing with winter warfare.

Jungle Rappelling

MASTER SERGEANT DAVE GOLDIE

Rappelling operations have become a routine part of virtually every infantry unit's training program in recent years. But one problem still faces each rappel mission — how to deploy the ropes safely. This problem can become catastrophic if the mission is to rappel into an area covered by dense vegetation, such as the jungles of Panama.

Rappelling is an effective means of inserting troops rapidly in a jungle. But it can be effective only if the ropes can get through the triple

canopy foliage, and often they cannot.

In the past, units based in the United States but undergoing jungle training with the 193d Infantry Brigade's Jungle Operations Training Center (JOTC) at Fort Sherman in the Republic of Panama have had their jungle training severely hampered by tangled ropes. As a result, the Jungle Warfare Branch of the JOTC set out to find a solution.

Many rope deployment systems had been tried at the JOTC — every-

thing from wrapping a rope around a log and letting it unroll as the log descended to just dropping a carefully coiled rope out the door. But none proved entirely dependable.

The Branch's cadre began experimenting on its own but could not find a workable solution. Eventually, a senior instructor, Sergeant First Class Carold D. Frady, by integrating his parachuting background with his rappelling experience, did come up with a solution to the problem.

The rope deployment bag issued as



Step 1 Starting at the bottom of bag, closest to weight pocket, coil ropes six to eight times.

a component part of the stability operations (STABO) extraction system proved to be an excellent starting point. (A salvaged deployment bag from a military parachute also proved efficient, but it was more bulky.) A device similar to a parachute deployment bag was fabricated and tried out in a field evaluation. After several modifications, the device evolved into an easily constructed, inexpensive deployment system that facilitated rappel missions into the thickest jungle without



Step 2 Slip stack of coils into retainer bands on each side.

entanglement. Here are the instructions for making it:

- Using a flat piece of canvas about 48 inches long and 18 inches wide, bar-tack to it two parallel strips of type III nylon the length of the canvas.

- Next, turn up the bottom 9 inches, sewing it along the sides to form a pocket (see illustration). Put rocks or a partially filled sand bag in the pocket to make sure the ropes deploy fully. Two pounds of rocks are enough to ensure that the ropes deploy properly through the trees. (In open areas, the bag can be used without this added weight.)



Step 3 Repeat the process of coiling and stowing until only 18 inches remain before the lower snap-link.

- Tack the two parallel nylon strips every two inches, and secure retainer bands (type 64 rubber bands work fine) between each tack, similar to those on a D-bag.

- Prepare the ropes in the normal rappel configuration and stretch them to full length. Place the bag at the loose ends of rope opposite the snap-links.

- Make sure all the rubber bands are present along the stowing lines of the bag and then form a bite in the two running ends of the rappel ropes, and place the bite in the center retainer band just above the stow pocket.



Step 4 With final center locking stow in place, roll bag from bottom to top.

- Fold the rope in an S-fold and stow it in the retainer band, working from side to side making sure the folds do not extend past either side of the bag.

- Place six to eight folds of rope in each retainer band, working toward the top of the bag. Then form a bite in the climbing ropes 24 inches below the first snaplink and stow it in the top center retainer band.

- After the bag has been inspected, roll the bag, going from bottom to



Step 5 Secure top flap of bag with tape.

top, leaving the snaplinks exposed. Secure the top flap of the bag with tape.

This bag proved so successful that the JOTC now requires the troops that come from the United States to use it for all their jungle rappel missions. In the JOTC program of instruction, each soldier must be able to attach climbing ropes to the bag and S-fold them so that no folds are sticking out of the sides of the bag. They

have to pack, roll, and tape the bag in 10 minutes.

Because of the effectiveness and ease of packing, transporting, and employing rappelling ropes with this system, many units in the United States, including the 101st Airborne Division (Air Assault), have adopted it for all of their rappelling missions, regardless of the terrain.

Anyone who has experienced rope entanglements during a rappelling

operation should try this system. It is worth the small cost in time and money.



MASTER SERGEANT DAVE GOLDIE is assigned to the Public Affairs Office of the 193d Infantry Brigade in Panama. He has previously served with the 19th ADA Brigade and as director of public relations for the Golden Knights, the Army's parachute team.

C D Training

LIEUTENANT KENNETH W. ARNOLD

Unlike most of the Army's infantry brigades, the 193d Infantry Brigade in the Republic of Panama has the additional mission of protecting American citizens and key installations in the event of civil unrest in its area of responsibility. This additional mission challenges the leadership of the Brigade's various organizations, and particularly that of its infantry companies.

Like other infantry missions, successful civil disturbance (CD) operations result from organized training and practice. The Brigade's CD training program, therefore, has been designed to build on the basic soldiering skills, beginning with the individual soldier and concluding with the company organization. Other types of units as well might find a similar program useful.

In the first phase of the program, individual soldiers, instructed by their squad leaders, learn the three uses of the riot baton: rest, defense, and

offense. They also learn how to care for and use CD equipment, from flak vests to face shields, which are invaluable aids to a unit during an actual CD operation.

Once the soldiers have mastered the use of the riot baton, the squad leaders teach them how to use the M16A1 rifle, with and without a bayonet, in CD situations. Great emphasis is placed on this aspect of the training program, for rifles are used in a CD operation only when the greatest possible force is required.

When a squad leader determines that his soldiers have mastered their individual skills, and with his platoon leader's permission, he begins training at the squad level. This second phase of training builds on the soldiers' individual skills to develop an effective maneuver force that can use the three key CD formations — squad time, squad echelon right (left), and squad wedge.

Because of the fluid nature of most

CD operations, it is important for a squad to be able to change its formations rapidly while remaining under the full control of its leader. And because a CD operation can start at any time, a squad leader must train his soldiers in those tasks that will enable them to react quickly and effectively. These include practicing alert procedures, inspecting personnel and equipment frequently, issuing orders, and conducting rehearsals.

The third phase of training moves from the squad to the platoon level. At this stage, the basic formations are the platoon line; the platoon line with general, close, or lateral support; platoon echelon right (left); platoon echelon right (left) with general, close, or lateral support; platoon wedge; and platoon wedge with general, close, or lateral support. Great stress is placed on coordinating the squads as they move through the various formations.

In addition, the platoons are

trained to establish observation posts, to conduct patrols in built-up areas, to integrate civil authorities into the operations, to evacuate casualties, and to react properly to sniper fire and to bomb threats.

Emphasis is also placed on the strict discipline that will be needed by all of the soldiers if they are committed to a CD operation. This training cannot be geared toward one operation; it must be a continuation of the discipline that has already been developed in garrison. A unit cannot be controlled in a CD situation unless it is a disciplined unit, responsive to the control of its leader.

The final phase of training develops the coordination that will be needed between the platoons and the various other elements of the company that will support them in CD

operations. Platoon coordination is developed by using six company formations: company line in depth; company line in mass; company line with general or lateral support; company echelon right (left) with general or lateral support; company echelon right (left) in depth with general or lateral support; and company echelon right (left) in mass with general support.

In addition, all of the company's elements must be trained to construct and emplace barricades and roadblocks, in particular on erecting triple concertina personnel barriers. This can be done if each squad is trained to lay wire, and it also gives the company commander the flexibility to lay wire at several different locations at the same time.

With positive leadership, the many

aspects of CD training can be combined to form a cohesive force. As a result, this force can be used effectively in a CD operation that calls for an organization capable of reacting quickly and efficiently to changing situations.



LIEUTENANT KENNETH W. ARNOLD is assigned to the 193d Infantry Brigade in the Republic of Panama, where he has served as a weapons platoon leader and a company executive officer. A 1979 ROTC graduate of Middle Tennessee State University, he has completed the Airborne, Air Assault, and Infantry Mortar Platoon courses.

Advance Party

SERGEANT FIRST CLASS STEVE L. OVERHOLSER

During the past few years I have had an opportunity to observe and evaluate many mortar platoons both in training and in testing. Of all the ARTEP tasks, the methods of emplacement used by the various platoons seem to vary the most. What is standard operating procedure for one platoon seems taboo for another, and our current field manuals have little to say about standardization. This is probably good in a way, for it allows experience and imagination to dictate method. But there are certain techniques, including the proper use of an advance party, that can be used to

save time during the emplacement of a platoon's mortars.

The purpose of an advance party is to locate, secure, and prepare mortar positions for the platoon so that when the latter arrives at a selected position it can emplace its mortars with little difficulty. The advance party's actions often determine how successful the platoon will be in occupying a position. And through its level of proficiency, the advance party can provide a degree of momentum that is essential either during an ARTEP or on a battlefield.

To do its job properly, therefore,

the members of an advance party must be well trained in their responsibilities. Their training should include such things as the proper size and depth of a baseplate hole for ground-mounted mortars, the use of directional stakes, the laying of wire (preferably a hot-loop), positioning and preparing the aiming circle, and security.

Our current doctrine calls for the advance party to consist of at least one man from each squad, one man from the fire direction center (FDC), and either the platoon leader or the platoon sergeant. From experience,

though, I have found it better to have two men from each squad involved in preparing a firing position. This number allows for an equal distribution of the workload, a more thorough and speedy preparation of the firing position, and the immediate establishment of local security.

Although the mode of transportation may vary from unit to unit, it is best to use the FDC vehicle for the advance party whenever possible. This vehicle not only has enough room for the soldiers and their equipment, it also provides an FDC that can be immediately operational when the platoon arrives.

ALERT

When the platoon leader receives his warning order, he should alert the platoon sergeant to form the advance party and prepare it for movement. The members of the party should collect their equipment and store it in the FDC vehicle where it can be checked by the platoon sergeant. Their equipment should include shovels, picks, aiming stakes, and a TA-1 or TA-312 (where appropriate) for each gun squad, plus an aiming circle, communication wire, a TA-312, and plotting equipment for the FDC.

Although the platoon leader may conduct his reconnaissance with or without the advance party, it is preferable for him to take the party with him. The party can then accomplish many of the preparatory functions that are conducive to an expeditious and orderly emplacement.

The platoon leader's reconnaissance should include the selection of a position, the location of the FDC, some local security positions, a physical or map selection of alternate or supplemental sites, the designation of ammunition holding areas, and alternate routes of movement. He should accomplish these things in accordance with the established tactical doctrine, the existing tactical situation, and his own common sense.

After the reconnaissance has been completed, the platoon leader can

return and lead the platoon to the new position or, using pre-arranged code words, he can radio for the platoon to displace. In the latter case, the platoon sergeant leads the platoon to the new position.

At the new location, the advance party takes care of security matters first. Then each man is assigned a specific task. Thus, if the mortars are ground-mounted, the platoon leader shows one of the men from each squad where to dig his baseplate hole and points in the general direction of fire. He lets the FDC representative know where to park his vehicle, and the proposed location of the guns for the laying of wire. He then prepares the aiming circle for operation.

For mechanized mortar units, the platoon leader uses his compass to

align two aiming stakes at each mortar position four to five meters apart in the direction of fire. When the squads arrive, the squad representatives direct their drivers to align the right sides of their vehicles with the aiming stakes, coming as close to them as possible. This places the mortars in the general direction of fire and usually does away with the need for a subsequent large shift when the reciprocal lay begins.

There are other less conventional methods that can be used to cut emplacement time. For example, after the baseplate holes have been dug, and before the platoon arrives, the squad representatives can be directed to place one aiming stake 100 meters out in the general direction of fire and another on the forward left



edges of the baseplate holes.

Using the aiming circle, the platoon leader then lays the crosshairs on the baseplate stakes and announces and records that deflection for each mortar. He then relays this information to the platoon, by radio or other means, and the gunners place that information on their sights when they displace. This prevents the possibility that the gunners will have to make large deflection changes after their aiming points have been identified. In fact, experience has shown a subsequent change of 10 mils or less to be the rule. Of course, experience and imagination should be the major considerations in using this system.

After the advance party has completed its preparatory tasks, the position is ready to be occupied. Each squad representative then becomes a guide for his squad. For ground-mounted mortars, he directs his squad's vehicle to the emplacement site and, after the squad's equipment has been off-loaded, guides the vehicle to a pre-planned area to be

concealed and camouflaged. At that point he returns to the mortar position to perform his normal duties.

At the same time, the remainder of the squad mounts the mortar in the general direction of fire, and the gunner refers his sight to the aiming circle and performs reciprocal lay according to the guidelines in the appropriate field manual. If the squad uses the alternate method mentioned above, though, the mortar is mounted with the deflection on the sight called in earlier. This enables the gunner to sight in on the aiming circle with a deflection that incorporates a large initial shift. His next reading should change no more than 10 mils, corresponding to a small deflection change.

After the gunner announces "zero or one mil, mortar laid," he then turns his sight to the previously positioned 100-meter stake, emplaces the near stake, and slips the black scale either to 2800 or to that announced by the FDC.

These techniques work very well,

even with Army National Guard mortar platoons, which normally get only about 16 hours of mortar training each year before their two-week annual training period. I have seen these platoons start out taking 15 minutes to emplace their mortars, and then, given 30 minutes of training in these techniques, reduce that time to four minutes or less.

Although these methods are not unique, they are not used on a large scale. Besides the apparent motive of drastically reducing time and avoiding confusion on emplacement, the proper use of an advance party provides stability of operations, an equal workload distribution, and security, all of which allow a mortar platoon leader to concentrate on what he does best — plan.

SERGEANT FIRST CLASS STEVE L. OVERHOLSER has served as platoon sergeant of a 4.2-inch mortar platoon and a weapons platoon and as a drill sergeant at Fort Knox. He has completed the Infantry Mortar Platoon Course and is now assigned to Readiness Group Selfridge in Michigan.

Personnel Inventory

MAJOR JOSEPH A. VERRETT

When an officer takes command of a company, one of his first tasks is to conduct a joint property inventory with the outgoing commander. But he must also conduct another important inventory at the same time — an inventory of the soldiers assigned to the unit. Just as a commander would never sign a hand receipt for property he had not seen or counted, neither should he assume all the people are there without conducting a personnel

assets inventory (PAI).

The PAI is a unit level physical accounting of enlisted, warrant, and commissioned personnel by grade, name, and Social Security number (SSN), compared and reconciled with the information on the SIDPERS Personnel Strength Zero Balance Report (PZB-C27) and the Personnel Data Card — SIDPERS (DA Form 2475-2).

Army Regulation 680-31 requires

that a PAI be conducted:

- Within five working days before a change in unit commanders.
- Fourteen calendar days before a unit is inactivated, discontinued, moved to another installation, or temporarily reduced to zero strength.
- By direction of commanders in the chain of command.
- When a unit's strength variance is two percent or more.
- Within 30 days after a unit is acti-

vated and personnel are assigned to it.

- Within a year of a previous PAI. (When a PAI is performed, for whatever reason, the annual PAI requirement is considered satisfied for that unit.)

A PAI that is required because of a change of commanders is normally conducted jointly by the departing and incoming commanders. When a joint PAI is not possible because of the delayed arrival of the new commander, the departing commander and a designated acting commander should conduct a joint interim PAI. A final PAI is then required within 15 calendar days after the permanent commander arrives.

Units that are organized under the consolidation of administration at battalion level (CABL) concept receive assistance and supporting documents from the Personnel Administration Center (PAC). The PAC provides the unit's SIDPERS personnel data cards, the latest SIDPERS PZB-C27 report, and copies of the Personnel Asset Inventory (DA Form 3986).

Before the PAI is conducted, the unit should check the personnel data cards to make sure that a card is on hand for each soldier assigned to the unit by written or verbal orders (subsequently confirmed in writing), regardless of his duty status. The next step is for the unit to match the personnel data cards to the PZB-C27 report. Thus, everyone listed on the personnel data cards should also be listed on the PZB-C27. Reassignment gains and losses reported after the "as of" date on the PZB-C27 report must be added or deleted, for this provides an updated roster of personnel assigned to the unit on the date of the PAI. Special procedures are indicated in the regulation for accounting for attached personnel.

On the day of the PAI, the departing commander holds a muster formation of all the soldiers assigned to the unit who are present for duty. Orders and other documentation should be available to verify the recorded status of persons officially



absent (hospital, leave, performing essential duties), assigned but not yet joined soldiers, and soldiers absent without leave. Routine pass requests should be deferred for the date the PAI is held.

The new commander should reconcile the information on these documents with an actual physical count of the soldiers, and should also verify each soldier's name, grade, and Social Security number with that shown on each soldier's identification card. Appropriate SIDPERS transactions should be prepared at the same time to update the automated files.

The departing commander must complete and sign Section I (Commander's Evaluation) of the DA Form 3986 in four copies. The new commander must complete and sign Section II (Authentication by New Commander) of the same form and he may either concur with the report or state his reasons for not concurring.

The completed Form 3986, with attachments, must be sent through

command channels and the SIDPERS office to the Military Personnel Strength Monitor (MPSM) at division, installation, or major army command level. When a PAI is conducted because of a change of command, the Form 3986 must be approved by the MPSM before a final clearance can be given to the departing commander. This clearance can be given by telephone.

By following these procedures, a new commander, as well as a departing commander, can ensure a smooth transition and an accurate accounting of a unit's most important asset — its soldiers.



MAJOR JOSEPH A. VERRETT, now assigned to Headquarters, U.S. Army, Europe, was formerly a personnel instructor at the Infantry School. A graduate of Southern University of New Orleans, he has served in numerous assignments, including platoon leader, company commander, and S3 Air.

JFCC

CAPTAIN GUY C. SWAN III

In the air-land battle of the future, teamwork among the services in planning and coordinating air-ground operations will be crucial. A unique course of instruction offered at Hurlburt Field, Florida, helps officers and senior noncommissioned officers from all the armed services to prepare for that teamwork.

The Joint Firepower Control Course (JFCC), a two-week course sponsored by the U.S. Air Force's Air-Ground Operations School (AGOS), is taught by selected Army, Air Force, and Navy officers, all of whom are thoroughly professional instructors with wide experience in various kinds of military operations.

Like the instructors, the students come from varied military backgrounds and tend to be highly motivated and professional. In fact, a good deal of the learning that takes place during the course comes out of the informal exchanges between the students. This also makes for some lively conversations and promotes interservice respect and confidence.

Much of the first week's instruction focuses on four main topics — Army organization, Air Force organization and missions, threat capabilities, and the functions of the Tactical Air Control System/Army Air Ground System (TACS/AAGS).

In the discussion of Army organization, the emphasis is placed on combat units below corps level. The students are briefly exposed to

current Army weapon systems; combat operations, doctrine and missions; fire support assets; and Army aviation. Military symbols, map overlay techniques, and communication procedures are also covered. In addition to being an excellent review for the Army students, this block of instruction helps to familiarize the other students, many of whom will serve as forward air controllers (FACs), with the Army's battle concepts and terminology.

OVERVIEW

A similar overview of Air Force organization and missions focuses on operational doctrine, aircraft, weapons, and communications. The Air Force instructors use the primary missions of tactical air operations as a framework for all the subsequent classes — interdiction, counter-air, close air support (CAS), tactical air reconnaissance, tactical airlift, and special air operations.

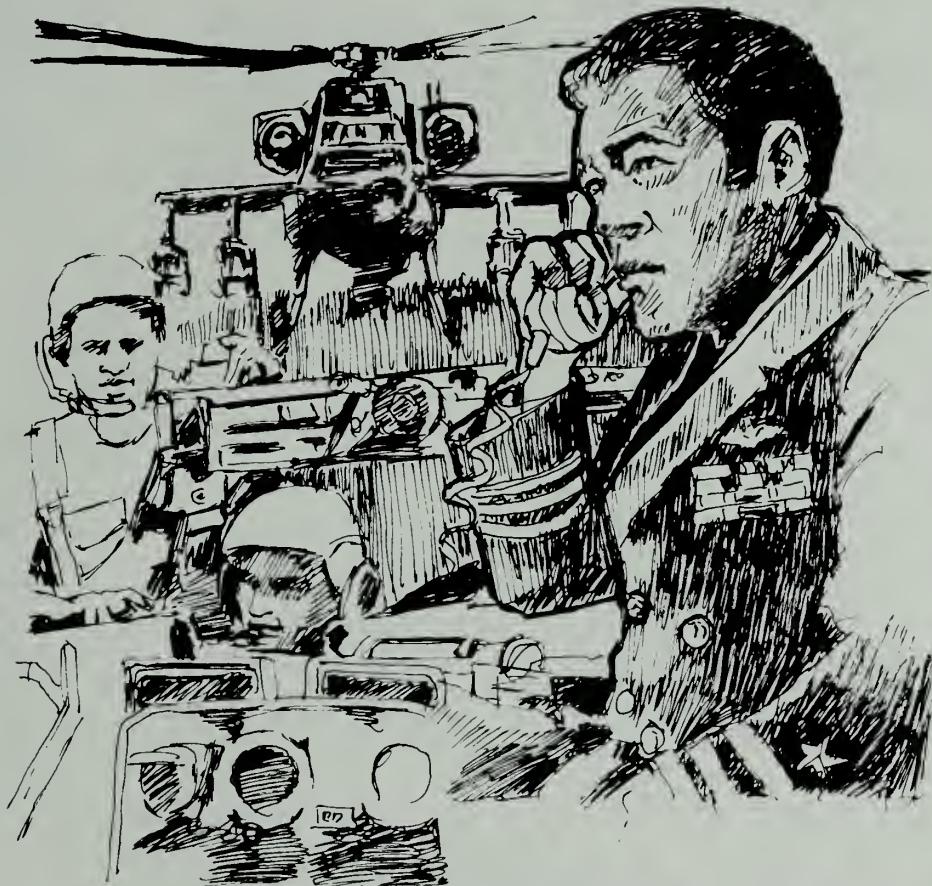
A parallel look at the threat forces is also presented. Through a series of classified briefings, the students get a comprehensive picture of threat air, land, and sea capabilities and of threat doctrine and strategies.

The first week's instruction concludes with several detailed periods on the Tactical Air Control System/Army Air Ground System (TACS/

AAGS). The students are shown how the various sophisticated Army and Air Force command and control systems work together to provide timely air support for ground operations. The focus is on the Tactical Air Control Party (TACP), because it is here that most of the initial coordination takes place between Army commanders and Air Force supporting units. With the TACP as a basis, the instructors cover the Air Force command and control system, following a sample request for air support through the TACS system.

The course's second week includes instruction in such subjects as tactical air reconnaissance, controlling and requesting tactical airlift, beacon bombing techniques, fighter tactics, and forward air control procedures. There is also a good discussion of the employment of the Joint Air Attack Team (JAAT), which calls for the simultaneous use of Army attack helicopters and Air Force fighter aircraft to defeat heavily armored threat formations.

The students then get an opportunity to visit the 33d Tactical Fighter Wing (F-15) at Eglin AFB, and are also given an orientation on Air Force special air operations and unconventional warfare. The special operations briefing includes a static display of the AC-130H *Spectre* gunship of the 1st Special Operations Wing. The AC-130H is a modified C-130 cargo aircraft that carries twin 20mm Vul-



can cannons, a 40mm cannon, and a 105mm Army howitzer.

The training highlight of the week is an eight-hour planning conference during which the Army students in the course act as an armored cavalry squadron staff conducting a covering force operation with the Air Force students playing the roles of air liaison officers (ALOs) and FACs. This exercise presents a rapidly changing tactical scenario in which the students must apply what they

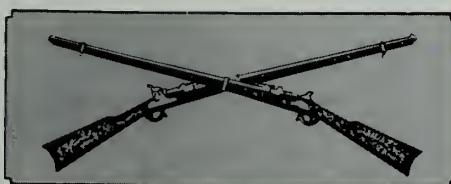
have learned about U.S. air and ground operations, threat capabilities, and the TACS/AAGS system.

The Joint Firepower Control Course is a tremendously valuable tool, and commanders at all levels should use it to prepare themselves and their units to fight the air-land battle. More information on the course and on the other courses offered at AGOS can be obtained from the Commandant, USAF Air

Ground Operations School, Hurlburt Field, Florida 32544.



CAPTAIN GUY C. SWAN III, now commanding a company in the 9th Infantry Division at Fort Lewis, recently completed the JFCC. A 1976 graduate of the U.S. Military Academy, he has also completed both the Armor and the Infantry Officer Advanced Courses.



ENLISTED CAREER NOTES



BRANCH CHIEF'S COMMENTS

As the new Chief of Infantry Branch, I want to assure you that all of us here will continue to work hard to meet the needs of all Infantrymen. In doing our personnel management and assignment tasks, we will use not only current Army priorities and policies, but also some good common sense in the decision-making process. In that regard, our goal is to place the right soldier into the right job at the right time.

It is imperative that all of you get involved in your own careers. Obtain a copy of your fiche record from Fort Benjamin Harrison and review it carefully. Make sure it is accurate and up to date, because decisions on promotions, assignments, and schools are based in large measure on the information on it.

Infantry Branch will continue to use this Career Notes section to pass on information of interest and concern to all of you.

"All the way!"

LTC RICHARD C. PAHLAND

RIGHT SOLDIER, RIGHT JOB

The Infantry Branch manages assignments and professional development for about 72,000 soldiers, including Rangers, Special Forces, and Drill Sergeants. We try to accomplish this by merging the needs of the Army with the needs of the individual and the priority of the assignment. All possible consideration is given to professional development, personal requests, and common sense, but there are times when the overriding rationale for a decision has to be the Army's policies and priorities. In these cases, we will respond as quick-

ly as possible in providing the rationale for a decision.

To make good assignments, we have to review each soldier's Career Management Individual File (CMIF). This file, maintained at MILPERCEN, is used for assignments and professional development for the ranks of staff sergeant and above. (The CMIF should not be confused with the Official Military Personnel File (OMPF), which is maintained at Fort Benjamin Harrison and used for all boards, such as for promotions and QMPs.)

When reviewing a soldier's CMIF, the assignment managers check his



DA Forms 2 and 2-1 and his preference statement (DA Form 2635) to see if he meets the criteria for a particular assignment and if the assignment would be beneficial to his career.

If the information on the CMIF is to be useful, it must be kept current. It is the job of the soldier's servicing MILPO to forward to Infantry Branch copies of his DA Forms 2 and 2-1 annually. It is the soldier's responsibility to make sure the MILPO does this and to see that we are aware of any changes in his preferences by sending us an updated copy of his preference statement. Also, the individual soldier must ensure that his DA Form 2 is updated at least twice a year. He must also be aware that the entries on the DA

Form 2 are the SIDPERS transactions that update the Enlisted Master File (EMF) at MILPERCEN, and that unless a SIDPERS transaction takes place at the local level, the EMF will not contain the most current information on him.

When the system nominates a soldier for a particular assignment, the Centralized Assignment Procedure (CAP III) retrieves information from the EMF. It is therefore imperative that the individual soldier make sure his DA Form 2 carries all the pertinent information concerning his duty position, his primary MOS, his last tour overseas and when he returned, his preferences, any Skill Qualification Identifier (SQI) — such as "P" for Airborne, "X" for Drill Sergeant, "S" for Special Forces, "V" for Rangers. Any Additional Skill Identifiers (ASI) the soldier may have should also be included. The EMF can maintain up to four ASIs on an individual, and the soldier must ensure that the one he is most current in is listed first.

All these factors have an effect on a CAP III assignment nomination. The system assigns point values to each of these items. When there is an open requisition for a particular assignment, all eligible soldiers are considered for the vacancy and the most eligible (the one with the most points) is nominated.

Then a roster of the job vacancies and of the individuals nominated to fill them is sent to the assignment managers and the professional development NCO, and they screen each soldier's CMIF to determine whether he is in fact the best qualified and whether the assignment will benefit his career and the needs of the Army. Branch personnel then decide where and when Infantry soldiers are assigned.

INFANTRY BRANCH

LTC Richard C. Pahland
Branch Chief



Monica M. Corcoran
Chief
Assignment Section

SGM Glen C. Sherwood, Jr.
Chief
Professional Development



MSG Tyrone D. Haigh
Senior Infantry
Career Advisor

Professional Development

(202) 325 or AUTOVON 221-8056/8057/8058/9399



SSG Gregory V. White
ANCOES Manager



Sue E. Sexton
ANCOES
Military Personnel Clerk



SFC Don Post
Infantry Reclassification



Juliette E. Miley
USASMA
Professional Development

E7/E8 Assignments

(202) 325 or AUTOVON 221-8056/8057/8058/9399



SFC William A. Crabill
E8 11B Career Advisor



Maggie L. Smith
Chief, E7/E8
Assignment Team



Milton L. Lowman
E8 Assignment Manager



Elizabeth Fenimore
E6/7 11C/H
Assignment Manager



SFC Danny R. Cline
E7 11B
Career Advisor



Brigid Fischer
E7
Assignment Manager



Tina M. Burroughs
E7
Assignment Manager

E6 Assignments
(202) 325 or AUTOVON 221-8056/8057/8058



SFC Franklin D. Bent
E6 11B
Career Advisor



Lenore F. Christenson
Chief, E6
Assignment Team



Gwendell Heath
E6 CONUS
Assignment Manager



Charles Rollins
E6 CONUS
Assignment Manager



Joann Filakousky
E6 Overseas
Assignment Manager



Brian X. Murray
E6 Overseas
Assignment Manager

E1-E5 Assignments
(202) 325 or AUTOVON 221-9517/9543



SFC Robert J. Hayes
E1-5 11B/C/H/M, E6/7
11C/H Career Advisor



Stephen W. Steiner
Chief, E1-5
Assignment Team



Robert T. Davis
E1-5 11C/H CONUS
Assignment Manager



Rosie E. Plummer
E1-5 11B/M CONUS
Assignment Manager



Carver E. Poindexter
E1-4 11B/C/H/M Overseas
Assignment Manager



Jackie Cohen
E5 11B/C/H/M Overseas
Assignment Manager

**Special Forces and Ranger Assignments and Applications
(202) 325 or AUTOVON 221-9429/8340**



MSG Edward O. Kinsley
SF/Ranger
Career Advisor



Theresia H. Palmer
Chief, SF/Ranger
Assignment Team



Elizabeth Alexander
SF Assignment
Manager



Mary Barkey
SF Applications



Frances Rawlings
Ranger Assignment
Manager

**Drill Sergeant Assignments and Applications
(202) 325 or AUTOVON 221-8070/8394**



SFC Vale D. Short
Chief
DS Assignments



Helen Krizmanich
DS
Management Specialist



Sarah Jones
DS Management



Colleen Hall
DS Management

PHYSICAL READINESS TEST

Soldiers in Army Reserve units now take the same Army Physical Readiness Test (APRT) as the Active Army soldiers take. The test, which consists of a two-mile run, pushups, and situps, will be given each year during a Reserve unit's Annual Training period.

Unit Reservists up to the age of 40 will take the APRT at least once a year and must attain a score of at

least 60 points on each test event and an overall score of at least 180 points.

The following chart gives minimum and perfect scores for men under 40. (The number to the right of the slash is the perfect score.)

AGE	PUSHUPS	SITUPS	TWO-MILE RUN
17-25	40/68	40/69	17:55/13:05
26-30	38/66	38/67	18:30/13:40
31-35	33/61	36/65	19:10/14:20
36-39	32/60	34/63	19:35/15:05

Army Reservists who are attending

full-time resident training or instruction for 56 days or more are also subject to the APRT. Students who fail to achieve the minimum standards on the test may be issued a completion certificate in lieu of a graduation certificate.

Reservists 40 and older, for now, will continue to take the four-mile march, but the plan is for these men eventually to run the two-mile event of the APRT after complete medical screening.

OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

On behalf of Infantrymen everywhere, I want to extend our thanks to the outgoing Branch Chief, Colonel James Sullivan. He never lost sight of the individual officer while satisfying the Army's assignment requirements. He will be missed.

In my first notes as Branch Chief, I would like to depart from the customary personnel management information to share some initial impressions, acknowledging at the same time that first impressions can be deceiving.

This is my rookie season at MILPERCEN, and I'm learning the personnel management system by matching my past experiences on the receiving end against what I see on the transmitting end. Ultimately, each infantry officer will have to judge the reliability of my views on the basis of their dealings with their particular assignment officers.

Like any human endeavor, assigning an officer (and his family) is a complex business. Each assignment must pass the test of common sense. There are no secrets in Infantry Branch or elsewhere in MILPERCEN. Computers are used to generate information, but an Infantry officer actually makes the assignment.

I am honestly impressed by the openness of the entire assignment process. Assignment officers are charged with satisfying Army requirements while taking the best advantage of each officer's inherent abilities, aptitudes, and interests, and also of his family needs. Each officer can influence the process, and so can his commander. The key to the system is a realistic appraisal of where he can contribute most to the Army's mission.

This is the year of progress for Infantrymen. One of our aims is to increase the Infantry officer's participation in the combined arms team. Simultaneously, we are trying to identify top-notch officers to serve as instructors at our service schools. The assignment officers (whose pictures are included in these notes) are determined to do their part. I encourage each officer to contact them and to evaluate my comments in light of his own experiences in dealing with them.

Recently, Infantry Branch has received several inquiries concerning the Combined Arms and Services Staff School (CAS³) and Specialty Code 28. The following explanations should provide answers to the more commonly asked questions.

LTC JOHN F. CONNOLY

CAS³

The Combined Arms and Services Staff School (CAS³) is designed to train Active and Reserve Component officers to function as staff officers at brigade, division, and installation level. The course consists of two phases. Phase I, the nonresident portion, involves about 140 academic hours of correspondence studies and culminates in an open-book comprehensive examination. Phase II is the resident phase in which students attend for nine weeks in a temporary duty status, usually between assignments.

The course teaches the officer what staffs are, what they do, and how they perform. Phase I of the curriculum is divided into a series of self-paced modules intended to provide the student the background knowledge and skills he needs to negotiate the resident phase. Some of

these modules cover the historical development of staffs, the organization of Army divisions, staff roles and relationships, quantitative skills, decision-making processes, threat forces, weapon system review, and a tactics overview.

Phase II is divided into six segments: staff techniques, training, budget, preparation for combat operations, mobilization and deployment, and a European tactical operations scenario. Each of these segments provides the students with a focal point for the staff interactive process. They are tied together with an overall general scenario that runs throughout the course.

Currently, the resident phase is being conducted at Fort Leavenworth, Kansas. It has not been decided whether this phase will also be offered eventually in Europe. The proposed implementation plan to bring CAS³ to full operation is: Four courses will be conducted in calendar years (CY) 1983 and 1984, and five courses will be conducted in CY 1985. The size of each class is intended to increase from the present enrollment of 240 officers to 600 in CY 1985. These scheduled increases are dependent, of course, upon favorable budgeting in future years.

To be eligible to attend CAS³, an officer must have completed an officer advanced course. He will usually attend between his seventh and ninth years of service, but not always.

Infantry officers will be automatically scheduled to attend CAS³ by Infantry Branch. The scheduling is based on each officer's date of availability or date of return from overseas. CAS³ will not be programmed immediately after an officer advanced course. Officers will be notified of resident class dates through their chains of command,

INFANTRY BRANCH TEAM



LTC John Connolly
Branch Chief



MAJ Dave Crittenden
LTC SC 11
and Command



LTC Lynn Hunt
LTC, Additional SC
and ROTC



MAJ Jim Gibson
LTC, Additional SC 54
Controller



MAJ Cully Warren
MAJ, SC 11 and ROTC



MAJ Russ Thompson
MAJ, Additional SC



CPT Jim Dezzutti
MAJ & CPT, Additional
SC 54 Controller



MAJ Terry Young
CPT, SC 11, Overseas
and Advanced Course



CPT John Kidder
CPT, Additional SC



CPT Ron Thompson
LT, SC 11

CPT Steve Smith
CPT, SC 11 CONUS
and Nominative



Elaine Martin
LT, SC 11 Accessions



CPT Mick Bednarek
Infantry Branch Rep
Fort Benning, Georgia

normally one year in advance, and will receive their initial nonresident instruction packets soon thereafter.

Beginning with the July 1983 class, only officers of year groups 1976 and later will be scheduled for attendance by Infantry Branch. This is necessary to make sure these year groups achieve the best participation. At present, CAS³ is not a prerequisite for CSC.

Questions or problems associated with CAS³ attendance may be directed to any of the captains' assignment officers within Infantry Branch.

SC 28 ABOLISHED

The Officer Personnel Management System (OPMS) lost one of its specialty codes effective 1 September 1982. SC 28, Training Developments, has been eliminated from the OPMS. The training function has been absorbed by SC 54, which has been renamed Operations, Plans, Training, and Force Development.

In other changes to these two specialty codes, Special Skill Identifier (SSI) 54A, Operations and

Plans Officer, has been renamed Operations, Plans, and Training Officer; SSI 54B, Combat Development Officer, has become ASI 7Y (SSI 54B has been eliminated); and SSI 54C, Force Development Officer, has had ASI 7X, Manpower and Force Management Functions, added to it.

Officers who formerly held SC 28 have had their records reviewed, and new additional specialties have been assigned. Almost 84 percent of the combat arms officers have been redesignated SC 54 and the rest have received other OPMS specialties that match their qualifications and training. Officers who were qualified in SC 28 were also awarded ASI 7Q to document those skills.

MILPERCEN's Combat Arms Division has sent letters of notification to officers who held SC28 informing them of their new specialty combinations, and it has also changed Officer Record Briefs to reflect the new specialties.

Any officer who wants to change his specialty combination, should write to HQ, MILPERCEN, ATTN: DAPC-OPE-I, 200 Stovall Street, Alexandria, VA 22332.

RESERVE COMPONENT NOTES

1983 PROMOTION BOARDS

The U.S. Army Reserve's mandatory promotion boards for 1983 have been established and will convene at the Reserve Components Personnel and Administration Center (RCPAC) in St. Louis as shown below:

APL BOARD	CONVENES
1LT to CPT	11 Jan 83
CPT to MAJ	8 Mar 83
MAJ to LTC	7 Sep 83
Warrant Officers	14 Jun 83

Officers will be considered if they are eligible for promotion on or before the following dates:

Warrant Officers	31 Aug 84
1LT to CPT	15 May 84
CPT to MAJ	31 Dec 84
MAJ to LTC	

Officers are advised to pay close attention to the promotion material they receive from RCPAC and to stay in touch with their Personnel Management Officers. They should also be careful not to confuse these boards with the unit vacancy boards that will be conducted by the three continental U.S. armies (CONUSAs).



BOOK REVIEWS



WHY WE WERE IN VIETNAM. By Norman Podhoretz (Simon and Schuster, 1981. 240 Pages. \$13.50). Reviewed by Lieutenant Colonel R.J. Rinaldo, Fort Eustis, Virginia.

Based on the results, the United States involvement in Vietnam was a disaster. Nevertheless, to those of us who served there and who have kept up with some of the literature that has appeared since the end of the war, the nobility of our purpose in being there in the first place is without question.

This book, therefore, is anti-climactic. It will not give us our parade or draw applause from a gathering at our alma maters. Nor will it get us any free drinks at the local bar. Still, it's nice to see our version of the truth published.

Podhoretz, a neo-conservative editor of *Commentary* magazine, tells why we went in, why we stayed in, and why we withdrew. His conclusion, in a nutshell, is that our participation was not immoral. A corollary is that the war was not conducted by brutes bent on sadism.

Despite its virtues, and despite the author's brisk writing style, the book is boring, perhaps because the issue has finally become boring. And that is good in my view.

We know that our nation and our military services must look to fresh challenges freed from the myths and shibboleths about national security policies that were generated in the wake of Vietnam. It is well to remember, though, that noble purpose remains ingrained in the American way of war — and ignoble causes should take heed.

THE WAR SYSTEM: AN INTER-DISCIPLINARY APPROACH. Edited by Richard A. Falk and Samuel S. Kim (Westview Press,

1980. 659 Pages). Reviewed by Major John C. Spence III, United States Army Reserve.

The editors, both of whom are political scientists, have compiled a collection of scholarly essays that treat the phenomenon of war and human conflict. The essays are of uniformly high quality and range from an analysis of Konrad Lorenz's theory of human aggression to the international law aspects of the control of force.

The interested reader, whether his background is social psychology, anthropology, sociology, political science, or international relations will find that this book is a valuable resource for the study of war as a system. The military professional will find especially valuable essays in the book's seventh part, which is called Decisionmaking Inquiries.

The essays are written in a sophisticated and scholarly manner and assume a background of professional experience on the part of the reader. This does not detract, though, from the book's intrinsic value as a resource guide.

Given the ever-changing technology of war and the changing nature of world politics, the professional military officer of the 1980s and 1990s should have a sophisticated awareness of war as a system. Falk and Kim impart to the reader such a sophisticated awareness.

WHEN TIGERS FIGHT. By Dick Wilson (The Viking Press, 1982. 269 Pages. \$16.95). Reviewed by Major

C.T. Guthrie, Fort Lewis, Washington.

Dick Wilson has written an excellent narrative history of the Sino-Japanese War that lasted from 1937 to 1945. From the Marco Polo bridge incident near Beijing to the Japanese surrender in September 1945, Wilson describes the events of this conflict between these two Asian giants in a thorough and comprehensive manner. Personalizing his presentation, the author relies heavily on diaries and other materials that were prepared by people who actually participated in the events described in the book.

It is a book for the military historian, the tactician, the Asian specialist, and the general reader. Using photographs and maps of selected battles, Wilson narrates the events of the war from the perspective of a neutral observer. He does not attempt any in-depth analysis of the events he writes about. Rather, his stated goal is to describe the events as objectively as possible, allowing the reader to interpret them.

For the most part, Wilson succeeds admirably, although there are times when he appears to sympathize with the Chinese cause. An interesting and valuable contribution to Asian history, this book should receive your careful attention.

COMBAT MOTIVATION, by Anthony Kellett (Kluwer Boston, 1982. 368 Pages. \$38.00). Reviewed by Colonel George G. Eddy, United States Army, Retired.

This is a book whose title should arouse the considerable interest of everyone who is concerned with what causes some men to fight and others to defect from combat. Yet when you realize that the book's preface is the

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We will furnish a publisher's address on request.

most interesting and comprehensively arrayed part of the entire book, you have to come away still thirsty for a rousing conclusion that never appears.

There is a paradox here. In the book you will find a fairly comprehensive digest of important and useful material — not original research — and yet it is lacking an effective recapitulation to aid in its practical application.

At the outset, the author declares that his effort is to be descriptive rather than prescriptive, and he certainly sticks to his theme. While there is much to catch one's attention, especially the case histories, those genuinely concerned with combat motivation must laboriously cull from the 19 chapters material that is substantive and worthy of application in the functional selection and battle preparation of both regulars and non-regulars.

The author feels that combat motivation is far too complex to lend itself

easily to simple or unidimensional explanations, and that it varies from soldier to soldier, from situation to situation, and from time to time. Thus, combat motivation is not amenable to policies that generalize the influence of particular factors or stress their unique roles, nor is it amenable to policies that fail to recognize the different levels of willingness and commitment among the soldiers at whom they are directed.

for digging into abstruse files.

From the clear and informative introductory chapters that deal with the state of the fleet and its organizational and personnel problems, the entire present and authorized array of U.S. naval strength is pictorially displayed, from the mighty capital ships to the workhorse auxiliaries and service craft, from battleships and carriers to aircraft, weapons, and electronic systems. The coverage is complete and reveals a high degree of professionalism.

Particularly interesting is the in-depth review of the Coast Guard and the Oceanic and Atmospheric Administration, both of which are valuable adjuncts to the defense establishment. Though separate in administration, these services are usually taken into the Navy in time of war, and they have a distinguished record of service, readiness, reliability, and competency.

The author writes from an authoritative background of consulting and

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analytical work for the Department of Defense on a full spectrum of naval matters. His book is recommended as a reference volume that contains all the answers.

SIX ARMIES IN NORMANDY,
by John Keegan (Viking, 1982. 365 Pages.) Reviewed by Lieutenant Colonel Richard P. Dexter, United States Army.

Combining the empathy for the common soldier of an Ernie Pyle, the psychological insight to human reaction under fire of an S.L.A. Marshall, and the analytical narrative style of a Barbara Tuchman, John Keegan, a noted British military historian, reexamines one campaign of World War II through the experiences of soldiers from six armies of different origin who participated in the campaign as allies or adversaries.

The immediate story centers on the period between 6 June and 25 August 1944, but the author's focus encompasses a much broader time frame as he blends in the national heritage of the various participants and constructs an intriguing story of certain military units involved in the first three months of bloody combat in the Normandy campaign.

The author always ends his books with a note for the future. Circumstances have changed, he feels, and high technology has made some of the old rules obsolete. But as his own countrymen learned in the recent fighting in the Falklands, certain classic principles of land warfare used by infantrymen for centuries still apply.

This book is must reading for all professional soldiers and private citizens who are genuinely concerned about the future and want to learn how to face it by reading the lessons of the past.

THE IMAGE OF WAR, 1861-1865: VOLUME III, THE EMBATTLED CONFEDERACY, Edited by William C. Davis (Doubleday, 1982. 464 Pages. \$39.95).

Antietam, Fredericksburg, Chancellorsville, Gettysburg, the Emanci-

pation Proclamation, the Northern blockade, all are included in this third volume of the publisher's magnificent photographic series on the American Civil War.

A project of the National Historical Society, this particular volume concentrates on the war in the east between September 1862 and July 1863 and on the great land battles that, for all practical purposes, determined the war's final outcome. Each of the seven short narratives is complemented by numerous photographs, the captions of which are used to supplement and expand the overall story.

As in the other published volumes in the series, many of the photographs have never been published before. The other three volumes are scheduled for publication in 1983 and 1984.

AFGHANISTAN: THE SOVIET INVASION IN PERSPECTIVE, by Anthony Arnold (Hoover Institution Press, 1981. 126 Pages). Reviewed by Colonel James B. Motley, Office of the Secretary of Defense (International Security Policy).

This concise, well-written book, set in nine chapters, traces Soviet-Afghan relations from 1919 to the present, with emphasis on the events that led to the Soviet invasion of December 1979. The author, a former intelligence analyst, contends that the Soviets have maintained a long-term pattern of aggressive intentions towards Afghanistan first through economic penetration, then through political subversion, and, finally, by military invasion and occupation.

The death of Stalin in 1953 ushered in an era of more flexible and sophisticated Soviet foreign policy. According to the author, during the period 1953-1963 economic aid proved to be an effective tool for the Soviets in their drive to establish a dominant influence in Afghanistan. But despite growing Soviet influence, the leaders of Afghanistan were not prepared to give up the country's non-aligned status.

For the next fifteen years — 1963-1978 — the Soviets continued

their economic penetration but placed greater emphasis on the manipulation of internal Afghan political forces through the Marxist-Leninist People's Democratic Party of Afghanistan. And from 1978 on, events in Afghanistan unfolded with an almost certain inevitability.

The strength of this book lies in the author's discussion of Soviet calculations and miscalculations of the cost of their Afghan adventure and U.S. policy options that are available to counter continued Soviet occupation of the country.

This informative book argues that Soviet aggressive intentions have been restrained only by the limitations of Soviet capabilities. It is highly recommended for the specialist and for the general reader.

RECENT AND RECOMMENDED

VICTORY IN BANGLADESH, by Major General Lachman Singh. Dehra Dun: Natraj Publishers, 1982. 320 Pages. \$19.95.

THE "AMAROC NEWS": THE DAILY NEWSPAPER OF THE AMERICAN FORCES IN GERMANY, 1919-1923, by Alfred E. Cornebise. Southern Illinois University Press, 1981. 272 Pages. \$24.95.

DER ERSTE WELTKRIEG, by Anton Wagner. 2. Auflage. Vienna: Verlag Carl Ueberreuter, 1982. 420 Pages. oS 95.

AUSTRALIA AT WAR, 1939-1945, by John Robertson. David and Charles, 1981. 269 Pages. \$31.50.

KENTUCKY FIGHTING MEN, 1861-1945, by Richard G. Stone, Jr. University Press of Kentucky, 1982. 126 Pages. \$6.95.

A TALENT TO SURVIVE: THE WARTIME EXPLOITS OF LIEUTENANT COLONEL RICHARD BROAD, M.C. By Rex Woods. London: William Kimber, 1982. 205 Pages.

VIETNAM WAR LITERATURE: AN ANNOTATED BIBLIOGRAPHY OF IMAGINATIVE WORKS ABOUT AMERICANS FIGHTING IN VIETNAM. By John Newman (Scarecrow Press, 1982. 117 Pages).

BRITISH DEFENSE DIRECTORY, VOLUME I, NUMBER 1, MARCH 1982. Published by Brassey's Publishers Limited. Published quarterly at an annual rate of \$307.50.

PRELUDE TO FAME. By Bertram Ratcliffe. Hippocrene Books, 1982. 112 Pages. \$14.95.

INFANTRY LETTERS



ASSAULT EQUIPMENT

Dear Sir,

We have received numerous replies and inquiries in response to our article, "Attack of A Desert Strong-point" (INFANTRY, July-August 1982, page 25). Several questions have been posed in regard to the availability of the items of equipment described in the article, especially tank minerollers and M157 projected demolition charges.

As the article mentions, the tank minerollers are now being used by selected units in USAREUR, and there are presently 360 "updated" (product-improved) M157s in the Army's inventory. Eighty-five were sent to Europe, while smaller numbers were designated for Korea. The M157 projected demolition charges do exist in the inventory and have for a number of years.

The real problem is the ability of units to obtain and train with either the M173 demolition charge or the training device, the M174.

CPT WAYNE J. SABO

CPT EDWIN L. KENNEDY, JR.

Fort Benning, Georgia

STRONG AND EFFICIENT

Dear Sir,

I have carefully read "Keep It Light," by Major John P. Gritz (INFANTRY, July-August 1982, page 6). The author makes some interesting points and brings out the spirit in all Infantrymen. As an Infantryman myself, I appreciate his argument, but I find too many faults in his analysis to allow the article to pass without criticism.

Soviet tactical doctrine has been changing to meet the needs of the

modern battlefield. (An excellent series of articles on Soviet military forces appears in the August 1982 issue of *Military Review*. Soviet forces are highly mobile and will make numerous penetrations to get to our rear areas for exploitation. Without a strong and efficient mechanized combined arms force, we will not be able to counter such an enemy thrust quickly and change on a rapidly moving battlefield.

We do not have to look only at a European battlefield to see this type of action. In the Middle East, for example, some nations also have forces structured along Soviet lines.

Mechanized infantry also enables us to exploit and pursue in offensive missions, which is vital if we are to destroy enemy command, control, and communications, and logistical facilities.

I would be the last to say we should let go of light infantry. I gained a deep appreciation for its need in Korea. Light infantry is needed in many potential trouble spots around the world, and it must be equipped and trained to go. But for the Army to return to a predominantly light infantry force would be using 1940s doctrine on the 1980s battlefield.

RICHARD D. DUBOIS

CPT, Infantry

Fort Bragg, North Carolina

HATS OFF

Dear Sir,

Hats off to Major John P. Gritz for his article, "Keep It Light," and to INFANTRY for publishing it in the July-August 1982 issue (page 6).

As a field artilleryman who was drafted into the U.S. Army Special Forces in 1964, I learned just how ef-

fective the foot soldier can be against all types of forces.

Light infantry needs to be a much more significant part of our total forces, and the time to make it such is now! With the current interest in physical fitness, with the ever-increasing cost of weaponry, and with a very strong possibility that our Constitution may be amended to require a balanced budget, we had better get on with organizing and equipping light infantry units as soon as possible.

ROBERT H. WHITE

LTC, Field Artillery

Fort Eustis, Virginia

RIFLE ZERO

Dear Sir,

I am writing in regard to an article in the May-June 1982 issue of INFANTRY entitled "Rifle Zero," by Captain Everett D. Mayfield. I find that I must take exception to a number of statements in the article.

First, I also have served as an enlisted Marine. I have not fired in competition as the captain has, but I have been a basic rifle marksmanship instructor for basic training at Fort Dix for the past two years. I have taught preparatory marksmanship, zeroing, field fire, zero/timed fire, record fire, and target detection.

The thing about the article that I disagree with is his concept of zeroing and the reasons for it. Here are my counterpoints:

- Zeroing is the mechanical process of adjusting a rifle's sights so that the rifle will hit a target at the distance the rifle is zeroed for.

- West European service rifles are not ordinarily zeroed by the soldiers who use them. Yet those same soldiers achieve significantly higher

qualification scores than our soldiers do.

- Every rifle is slightly different, and thus each rifle will have a slightly different sight setting when it is correctly zeroed than another rifle will have.

- If an experienced firer zeroes a rifle so that the shot groups are centered in the circle of the new zero target, then any other experienced firer can pick up the same rifle, fire shot groups at the new zero target, and hit inside the zero circle. (I have proved this in practice to skeptical drill sergeants here at Fort Dix.)

- Stock weld varies from position to position, even with the same firer. Soldiers must be experienced enough in different positions to hit targets consistently from the positions they are most likely to use in combat, including different stock welds.

My next contention, I'm afraid, has little support: I feel that novice firers should not zero weapons until after they can hit what they shoot at. It works this way: Experienced firers zero weapons and periodically check weapon zeros. The new firer is issued a rifle that is already known to be able to hit the target. When a novice is consistently hitting the target, the trainer can see that he has learned to

apply marksmanship fundamentals, and so can the firer. Feedback is the best learning device. If the soldier does it right, he hits the target. If he does it wrong he misses. And the marksmanship trainer trying to diagnose shooter problems doesn't have to worry about where the rifle is hitting compared to where the new soldier is aiming. The trainer knows that the rifle will hit the target if it is correctly aimed, if it is held steady, and if the firer practices breath and trigger control.

This is a theory that I feel should be completely tested. I have personally pre-zeroed rifles for problem firers, then I have taught them to shoot on the basis that if they hit the target they are right, and if they miss, they are wrong.

My final point about zeroing, and, I think, the key one, is this: If a soldier is on the battlefield and his rifle breaks, he has to pick up any rifle he can reach — perhaps one from a fallen squad member — and immediately engage enemy soldiers who are trying to kill him. Is he going to stop and zero that other rifle now? No. But if, while the squad was in its last assembly area, somebody made sure that all the squad's weapons were correctly zeroed, then that

soldier, or any other soldier in the squad, can effectively use the weapon he grabs at effective combat ranges.

There are a lot of marksmanship myths in the field. And there are an awful lot of soldiers out there who cannot shoot. We need to change that. Our lives and our country depend on our doing it right the first time.

MICHAEL D. SETTLES
SSG, USA
Fort Dix, New Jersey

GOOD SHOT, BUT ...

Dear Sir,

I have just read the May-June 1982 issue of INFANTRY and I was especially interested in Captain Everett D. Mayfield's article, "Rifle Zero."

Many times I have been sent to the range to fire for qualification with a rifle I have never seen before, much less zeroed. The weapon I fire on the range is often not the weapon that is specified on my weapon card. It is the rifle that is next on the rack as the unit armorer hands them out. At the range, I have rarely been given time and ammunition to zero my weapon properly.

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I fired in civilian competition for many years, starting with small-bore rifles at age 13 and working up to the National Match course with an M1 Garand. I have also fired at moving targets under field conditions during many hunting trips. In short, I am a good shot, and no one can tell me otherwise. Yet I am wearing only a Marksman badge on my uniform because I have never been allowed to show what I can do. You can imagine what this does to my pride.

I hope Captain Mayfield's article will strike a responsible chord in the hearts of those who conduct marksmanship training and qualification firing.

PAUL F. ADAMS
SSG, USAR
Tucson, Arizona

INFANTRY UPS AND DOWNS

Dear Sir,

I am writing in response to "Infantry: A Prevailing Theme," by Lieutenant Peter W. Harris, USN (INFANTRY, July-August 1982, page 16).

The best reason for the rise and decline in the use of infantry could be

the emphasis placed on infantry; that is, the rise of the chariot might have caused a decline in the use of infantry. In other words, the rise of a different (or novel) weapon system could and usually did cause the decline of infantry. But proper usage increases with time, training, and understanding of how to best employ

the line for exploitation by the cavalry. Neither Wellington's artillery nor his cavalry stopped D'Erlon's or Jerome's attacks; the British Infantry did! And the author might have mentioned the fact that the British Foot Guards (with assistance from the 52d Light Infantry) stopped and then turned back the French Guard.

As to World War I, the infantry's decline during the middle of that war was due to the fact that most of the combatants' pre-war armies were devastated and the raw recruits had not received proper or sufficient training. The result was the great frontal attack bloodbaths. The successful German Sturmtruppen attacks in 1918 were due to training, albeit in the new tactic of small infantry unit infiltration.

Finally, as to the French column, one tactical formation consistently defeated the column — the British two-rank line — through superior morale, discipline, training, and firepower. As Napoleon once said, "The moral is to the physical as three is to one."

FRANK W. LESLIE
SSG, USA
2d Armored Cavalry Regiment



infantry (or any other weapon system, for that matter).

Two of the examples Lieutenant Harris uses are not correct, as I see it. At Waterloo, Napoleon was declining in his tactical abilities, and he was faced by a soldier who was rising in his abilities. Napoleon used his artillery to weaken the enemy line so that his infantry columns could break

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From The Editor

The calendar year is once again coming to a close, and with it, INFANTRY closes out another year, its 62d. During this special time of year, not only are there preparations for such time-honored holidays as Veterans' Day and Thanksgiving Day, it's time to review the past year with an eye to making things better during the next year. This is also the one "authorized" time when the Editor can blow INFANTRY's horn — and get away with it.

It's been a good year for INFANTRY. Artistically, we excelled internationally: The cover of our January-February issue was accepted for display at the CREATIVITY '82 show and for inclusion in the CREATIVITY 12 Annual. The CREATIVITY show is a major international award show for visual professionals. We were also able to maintain an excellent number of paid subscribers, which has insured, in part, our Subscription Service Fund's financial good health. Finally, my small staff of dedicated individuals did a superb job in producing the six issues, and in handling the routine office matters in a professional and timely manner. They are, indeed, a committed lot.

Of course, one can't have roses without accepting the thorns. We continue to need new material and new subscribers. We ask all of our dedicated writers to continue to WRITE. For those of you who have never submitted an article for publication, we encourage you to join the discussion, to air your views, and to share your thoughts. We will help you in any way that we can to publish your manuscript.

Many of our readers seem to feel that because INFANTRY is sent to every Infantry unit in the Army, they do not need a personal subscription. We think the answer lies somewhere between professional branch pride and staying actively abreast of our profession. INFANTRY contains the most current combined arms information available at the company level. We will continue to do our part in keeping it an instrument for stimulating professional thought and for broadening your knowledge base.

To all who have supported and read INFANTRY throughout the year, our sincere thanks. All of us at INFANTRY wish you and yours a healthy and joyous Holiday Season. We look forward to serving you in 1983.

MDB

OUTSIDE BACK COVER:

Arctic Test Center, Fort Greely, Alaska, 1974, by Lieutenant Mark McFaul. (United States Army Art Collection)



38



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